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STUDENT SELF-ASSESSMENT AND STUDENT RATINGS OF TEACHER
RAPPORT IN SECONDARY STUDENT COURSE RATINGS

by

John Wilford Roe

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Instructional Technology and Learning Sciences

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2010

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ABSTRACT

Student Self-Assessment and Student Ratings of Teacher Rapport
in Secondary Student Course Ratings

by

John Wilford Roe, Doctor of Philosophy

Utah State University, 2010

Major Professor: J. Nicholls Eastmond, Ph.D.

Department: Instructional Technology and Learning Sciences

This study involved administering two rating forms (student self-rating on commitment and student rating of teacher rapport) to approximately 1,400 secondary students taught by 12 different teachers at two different high school Latter-day Saint (LDS) released time seminaries along the Wasatch Front in Utah. Seminaries and Institutes of Religion (S&I) function within the Church Educational System (CES) of the LDS Church, providing religious education for secondary students between the ages of 14-18. The purpose of this study was to explore relationships between student, teacher, and course characteristics on student ratings of teacher rapport and to explore a possible relationship between student self-assessments on their own commitment to learning with student ratings on their rapport with their teacher. Evidence suggests that teacher characteristics such as the teacher's age and experience have little to no impact on student ratings of teacher rapport. Female students tended to rate their teacher more favorably on

rapport than male students, although practical significance was minimal. Younger students reported greater interest in seminary and higher-grade expectancy. They also tended to rate themselves higher on commitment. A statistically significant difference was found for teacher rapport scores between two groups based on the order of test administration. Group 1—self-first (student self-rating before student rating of teacher rapport) reported higher levels of rapport than group 2—comparison (student rating of teacher rapport prior to student self-rating). Students tended to rate their teacher more favorably after completing a self-rating on commitment. Practical significance between study groups was minimal because findings were small. Further research is suggested based on these findings to seek more understanding regarding the relationship between student self-evaluations and student ratings of their teacher.

(117 pages)

ACKNOWLEDGMENTS

First, I acknowledge my wife and children and express my deepest gratitude for their continuous encouragement and support. I also express gratitude to my mother, father, and other family members. I would like to thank my entire doctoral committee for their expertise and guidance. Dr. J. Nicholls Eastmond, my committee chair, has always been a source of valuable insight and wisdom. Dr. Joanne P. H. Bentley and Dr. Matthew J. Taylor have been especially helpful in specific areas of my research and writing. I also wish to acknowledge the many colleagues and supervisors in both the Latter-day Saint Church Educational System and the Latter-day Saint Research Information Division of the Correlation Department for being so accommodating and encouraging in helping me to reach my higher educational goals.

John Wilford Roe

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CHAPTER I

INTRODUCTION

Some people believe that one of the best data sources for evaluating teacher quality is educational outcomes, such as achievement scores or student-produced products, and that successful education, in large part, is determined by how well students perform on achievement and attendance measures. Standardized achievement testing and attendance requirements largely determine the success and educational future for students. Therefore, successful teaching and learning can be determined by measures of student achievement and/or direct measures of student performance.

For classes where outcomes are not well defined or are poorly assessed, observations of teacher behaviors through student course ratings provide the next best source of evaluation data. Students see more of their teacher than any other observer such as teachers' colleagues, principals, or other administrators. Although, there has been an ongoing debate over the validity and/or usefulness of these ratings, their use is wide spread throughout the U.S.

Student course ratings of teacher quality, although relatively easy to obtain, have questionable utility. Student course ratings have been studied for years (predominantly at the university level). Student ratings of instruction were first introduced to North American universities in the mid-1920s (Doyle, 1983), and have been the subject of much research since that time. There are multiple interpretations regarding the validity of student course ratings and how they might be used to improve teaching and learning. For example, Greenwald (1997) suggested that student course ratings have gone from being

severely questioned in the 1970s to being viewed in most expert opinion as reasonably valid and reliable by the early 1980s, with this view presumably continuing to the present day.

Other teachers remain skeptical about student course ratings and whether these ratings are both valid and useful. Some argue that student ratings are actually biased by various factors that are unrelated to a teacher's performance (Marsh & Overall, 1979; Wilson, 1998), including grade expectancy, precourse student interest, and course difficulty. Others feel that although such biasing factors do exist, they are minimal (Feldman, 1978; McKeachie, 1979), particularly when evaluations are well written and administered correctly (Marsh, 1984). This ongoing controversy has affected the perceived credibility and usefulness of student course ratings; particularly when they are used to help make important administrative decisions (McKeachie, 1997a).

The questionable utility of student course ratings is especially true for elective classrooms where less student commitment is expected for high grades. That is, there is a tendency for students in elective classes to demonstrate high teacher approval (teacher rapport) with little discrimination of teacher behaviors that would provide useful feedback to the teacher or their supervisor.

Kohlan (1973) found that teacher characteristics dealing with aspects of rapport were more stable over time than other course characteristics, while upperclassmen, females, and students with higher GPAs all tended to rate teachers more positively. Although student course ratings can provide helpful information for teachers and administrators, student self-assessment can also provide helpful information to teachers

and administrators as well as the students themselves to enhance their learning.

According to the actor/observer perspective bias under the attribution theory (Pintrich & Schrauben, 1992), this study suggests that students are more likely to consider their own poor behaviors based on specific personal situational factors rather than general dispositional factors that are often attributed to the behavior of others. Thus, students might be more thoughtful and critical when rating their teacher.

This actor/observer perspective bias under Attribution Theory may provide further understanding as to why students would rate their teachers with a more thoughtful and critical rating (see literature review). This study suggests that giving students an opportunity to complete a self-rating on their commitment to learning prior to their teacher rating would foster student self-awareness and encourage introspection and, as a result, the student would demonstrate a more thoughtful perception of their teacher, thus, have a significant influence on the teacher rating.

A significant amount of research has been conducted to broaden current understanding between teacher or employee self-ratings and ratings of others, both in education and in business management (see literature review). What is not clear is whether students experiencing self-assessment will allow the consideration of poor teacher behavior without general dispositional attributions. Various aspects of student self-assessment have shown to be very beneficial to educational aspects of learning (Costa & Kallick, 2004; Olina & Sullivan, 2004; Ross, 2006; Stiggins, 1998, 1999; Vos, 2000). One important aspect of self-assessment and professional development is to compare an individual's self-rating on performance with how others rate that

performance (i.e., supervisor, colleague, etc). Teacher self-assessments have been compared to student ratings to measure the extent of correlation between them.

A significant amount of research has been conducted to broaden current understanding between self-ratings and ratings of others, both in education with teacher self-ratings and ratings of others (Boud & Falchikov, 1989; Braskamp, Caulley, & Costin, 1979; Centra, 1973; Feldman, 1988, 1989), and with superior and subordinate ratings by business management (Atwater & Yammarino, 1992; Baird, 1977; Drory, 1988; Furnham & Stringfield, 1998; George & Smith, 1990; Heneman, 1974; London & Wohlers, 1991; Meyer, 1980; Reid & Levy, 1997).

If student self-assessment allows the consideration of poor teacher behavior without general dispositional attributions, students could provide a more critical set of observations about their teacher's behaviors. Students may rate their teacher without feeling they have negatively impacted someone they like. These more critical observations could then serve as a more discriminating evaluation of teacher quality. To this point, no study has examined the effect of student self-ratings on later ratings of teacher quality (teacher rapport). Therefore, this study will examine various teacher, course, and student characteristics as they relate to student self-ratings and student ratings of teacher rapport. This study will also look at the *process* of administering a student self-rating on commitment administered just prior to the student ratings of their teacher and vice versa to measure potential relationships between comparison and treatment groups. This study answered the following research questions.

1. Does student self-assessment prior to the assessment of teacher rapport

influence the assessment of teacher rapport?

2. Do teacher and course characteristics predict student perceptions of teacher rapport?

3. Do student characteristics predict self-report of student commitment?

4. Do student perceptions of teacher rapport predict student self-report of student commitment? If so, does order of assessment matter?

5. Are reliability scores of student ratings of teacher rapport different when students complete a self-assessment on commitment immediately prior to their rating of teacher rapport?

CHAPTER II

REVIEW OF LITERATURE

Successful teaching and learning in elementary, secondary and post-secondary education is of great importance to parents, teachers, administrators, and government officials. Educational outcomes such as achievement scores and attendance records are perceived by most parents, teachers, administrators, and government officials as some of the best data sources for evaluating successful teaching and learning in core content areas. In elective classes where outcomes are not as well defined or as consistently assessed, observations of teaching are the next best source of information about successful teaching and learning. Research suggests that students express a tendency to give higher teacher ratings in elective courses compared to required courses in core content areas (Cashin, 1990; Darby, 2006; Ory, 2001). Attribution theory suggests that individuals tend to attribute the behavior of others as dispositional while seeing their own behavior as situational. Therefore, students are more likely to consider their own behavior as non-dispositional becoming more self-critical. What is not clear is whether students experiencing self-assessment on their own commitment level (non-dispositional) will allow the consideration of poor teacher behavior without dispositional attribution providing a more critical set of observations that could serve as a more discriminate evaluation.

This review of literature began when gathering articles in the Fall of 2006 by searching the ERIC through Ebsco Host electronic database using the search query “Course Rating*” (the asterisk in the search query allows for plural use of the term)

between the years 1970 to 2009, which resulted in 73 articles. I studied in depth approximately 30% of these articles that were determined relevant to this study and employed a branching technique by searching the reference section of relevant articles. In addition I searched Google Scholar using the query “Course Rating*” (the asterisk in the search query allows for plural use of the term) between the years 1960 to 2009 resulting in 1,080 articles. I studied in depth approximately 10% of these articles that were determined relevant to this study using the branching technique previously mentioned.

Furthermore, I queried “student self-assessment” in the exact phrase category through ERIC, which resulted in 205 articles. I studied approximately 20% of these articles by employing a branching technique and searching the references of key articles. Continuing this research approach, I queried Google Scholar between the years 1990 to 2009 using the same search term “student self-assessment” in the exact phrase category, which resulted in 2,890 articles. I studied in depth approximately 10% of these articles that were determined relevant to this study and utilized the branching method as mentioned previously to further my research. Virtually all the articles in this literature review were found through this process of utilizing the branching technique and searching the references of key articles.

Observations of Teaching: Student Course Ratings

Student course ratings have been a major point of interest over the past 80 years (predominantly at the university level). Student ratings of instruction were first introduced to North American universities in the mid-1920s (Doyle, 1983), and have

been the subject of much research since that time. Arreola (2008) suggested that the bulk of literature has come forth over the last 30 years. As previously mentioned, Greenwald (1997) suggested that over the course of three decades student course ratings evolved from being severely questioned to being viewed in most expert opinion as reasonably valid and reliable. One notable aspect of Greenwald's research is the relationship of the number of studies that argued for biases diminishing (from 15 to 3 between 1976-1985) with the number of those studies that showed evidence for validity reaching 25 in 1985 and steadily declining into the 90s as validity became less of a concern due to the surmounting evidence in its favor.

To follow up with this research I conducted the same electronic search as Greenwald (1997) using the same search query (student rating* and teaching evaluation*) and (bias OR valid* OR invalid*) in PsychINFO and Eric from 1996 to 2009. (The asterisk in the search query allows for the plural use of the term). This search query identified 83 articles in PsychINFO (published articles) and 16 articles in ERIC (unpublished articles) over the past 13 years. Of these articles, 16 showed supporting evidence that student course ratings are valid. However, in addition to these articles, 24 (approximately 1 in 4) referred to the need for improving the usefulness of student course ratings.

This recommendation supports the theory that there has been a shift in emphasis over the past 13 years from the investigation of the validity of student course ratings to examining the more direct question of how student course ratings are being put into practice (see Figure 1). Theall and Feldman (2008) suggested a shift in student course

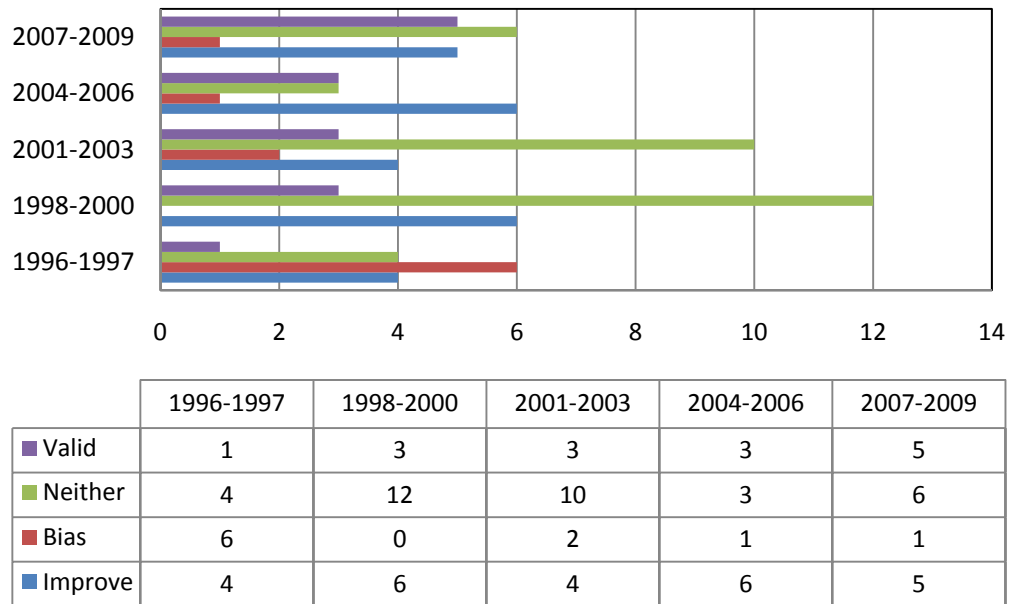


Figure 1. Shift in emphasis on student course ratings. This figure summarizes findings based on a query made in PsychINFO and ERIC using the same search terms and criteria as Greenwald (1997). The additional category is the number of articles seeking to improve the use of student course ratings in practice.

rating emphasis in recent years from narrow psychometric studies on reliability and validity to the application of course ratings research. In other words, there is not so much a concern as to whether these ratings are valid as much as whether these ratings are appropriately used and applied in practice.

Student course ratings have been gaining prominence as the most predominant rating instrument for measuring teacher effectiveness. Wagenaar (1995) posited that well over 90% of universities are using student rating forms. Beran, Violato, and Kline (2007) cited that student course ratings are being used regularly at virtually all universities and colleges in the U.S. and Canada.

Among the various sources of research suggesting the validity and utility of

student course ratings the most comprehensive may be a series of articles that appeared in the November 1997 issue of the *American Psychologist* (d'Apollonia & Abrami, 1997; Greenwald, 1997; Greenwald & Gillmore, 1997; Marsh & Roche, 1997; McKeachie, 1997b). These articles support the research that student course ratings are valid instruments. Overall, the general approach to the utility of student course ratings for administrators in monitoring the level of teacher quality among students should be only crude judgments on whether a teacher's performance is exceptional, adequate or inadequate (McKeachie, 1997b). The ratings are often used to help determine teacher effectiveness, and to make decisions on professional advancement, and hiring. Most teachers have found student course ratings to be useful in bettering their own teaching, although some remain adamantly opposed to these ratings and to their use by administrators in the decision making process.

Teacher Skepticism with Student Course Ratings

Some teachers are skeptical about student course ratings questioning whether students are actually capable of dispassionate appraisals of quality, being too naïve and not really knowing what is good for them. These issues have been addressed in the literature as myths that seem to continually surface with regards to student course ratings. Aleamoni (1987) and Felder (1992) addressed several of these concerns using the literature on student course ratings in an effort to clarify such concerns as myths.

Another impediment to their use is the concern whether the ratings are perceived as valid. Arreola (2008) suggested that most often teachers are not thinking of validity in

terms of the psychometric definition of validity, but rather in their own terms of whether the rating form is measuring those things they think it should be measuring. Others suggest that the validity of teacher ratings is often brought into question mainly because teacher effectiveness has not been universally defined (Chandler, 1978; Marsh, 1983; McKeachie, 1997a), or that the argument deals more with the process of putting the instruments into practice than the psychometric aspects of analysis (Marsh & Overall, 1979; Theall, 2001). As previously mentioned, a substantial effort was made to substantiate the validity of student ratings in the publication of the American Psychologist (d'Appollonia & Abrami, 1997; Greenwald, 1997; Greenwald & Gillmore, 1997; Marsh & Roche, 1997; McKeachie, 1997b). In light of this effort, others continue to debate whether student ratings of their teacher are used appropriately in making personnel decisions (Sproule, 2000; Trout, 2000), and how well teacher ratings relate to learning (Armstrong, 1996), although most of the literature states that well designed, well tested rating forms do highly correlate with student learning (Arreola, 2008).

Student, Teacher, and Course Characteristics

Student, teacher, and course characteristics are three major factors that show strong correlations with student course ratings (Kierstead & D'Agostino, 1988). Other studies show that measures for teaching effectiveness are susceptible to judgment biases dealing with student characteristics (Scullen, Mount, & Goff, 2000; Stanfel, 1995) such as reflecting the social needs of the rater, actually giving more information about the student than the teacher (Chandler, 1978), the level of student interest before the course

(Marsh, 1982), and the expectations of students (McKeachie, 1997b). Beyond individual biases of students, other research that deals with the student's perspective of their teacher or course include: issues of grading leniency (Germain & Scadura, 2005; Griffin, 2004), course difficulty (Mason, Steagall, & Fabritius, 1995; DeCanio, 1986; Everett, 1977), teacher charisma (Spooren & Mortelmans, 2006), instructor popularity (Germain & Scadura, 2005), and the physical attractiveness of the teacher (Geobel & Cashen, 1979; Hamermesh & Parker, 2003; Landy & Sigall, 1974). Based on this review of the literature, the following three factors were perceived as most prevalent among potential biasing factors dealing with the validity of the teacher ratings at the university level: precourse student interest, course workload/difficulty, and grade leniency. There are obvious differences between university level students and secondary students; however, these differences are not significant enough to affect the application of research findings for student course ratings in both populations (Anglin-Bodrug, 2006). Although most studies have been conducted at the university level, the research findings have relevance and value in addressing similar issues at the secondary level (i.e., seminary).

Precourse Student Interest

A significant proportion of students who attend seminary do so in part because of demands placed upon them by their parents, and many attend because they enjoy the experience. However, not all students have the same interest in seminary, and interest can fluctuate from day to day. Without requirements for student outcomes that determine credit for graduation, students can come to feel that seminary does not require much effort or work. As explained earlier the amount of work required by a teacher and what

type of grade they assign may factor into how a student perceives teacher rapport.

Research suggests, from populations other than seminary, that precourse student interest is more predictive in student course ratings than other variables such as workload/difficulty, expected grade, and class size (Marsh & Cooper, 1981). Furthermore, college-level studies show that required courses show less favorable ratings than elective courses (Arreola, 2008). This finding may have some application to whether a seminary student is attending because they want to or if they are being required to do so by their parents.

Course Difficulty/Workload

When students are enrolled in a class that turns out being more difficult than they thought it would be the course requirements may influence their rating the teacher of that class. LDS Seminaries and Institutes of Religion (S&I) have no standard criteria for the amount of coursework given in seminary and Institute. Therefore, this phenomenon is likely to occur as different teachers require varying levels of course workload and difficulty. The research on course difficulty/workload is mixed. For example, when controlling for the grade earned, students who thought the class was easier than they had expected tended to give a more favorable rating than those who thought it was more difficult than anticipated (Addison, Best, & Warrington, 2006). However, other research suggests no correlation between workload and course ratings, and encourages teachers to focus more on teaching methods than the amount of course workload (Dee, 2007).

Grade Leniency

Based on a review of the literature, the issue of grades creating a biasing effect on

student course ratings is the most prevalent. Arreola (2008) claimed that the question regarding grade leniency is the single most researched question among all the literature with close to 500 studies conducted. With this in mind consider the fact that S&I has no standard grade policy to determine credit. Although a grading system is not required to determine credit for the course, many teachers still employ a grading system in S&I. Some argue in the literature that the implementation of student course ratings has caused many teachers to ease up on their grading policy to get higher ratings from their students. Astin (1998) posited that the average grade assigned at the university level has been steadily increasing over time suggesting that grade inflation may be the explanation. Simpson and Siguaw (2000) suggested that some teachers may actually try marketing (selling) education at the university level through means such as lowering teaching, grading, and course standards, claiming that teachers have marketed education through biasing factors that do not relate to teacher performance like the attendance policy, and amount of homework (i.e., student consumerism). Research at the university level also suggests a significant link between grade leniency and student course ratings (Greenwald & Gallimore, 1997). Further research suggests a medium to strong relation between academic achievement and student socioeconomic status (Sirin, 2005).

A Focal Point for this Study: Teacher Rapport

Important aspects of teaching that should be measured through student course ratings because they are more related to student learning are instructor skill, course organization, and various aspects of teacher-student rapport (Olivares, 2001). Sadoski

and Sanders (2007) analyzed student course ratings across 5 different courses from the first and third years of school and found that high quality items consistently loaded on course organization, clearly communicated goals and objectives, and instructor responsiveness (teacher efficacy and support). Student-teacher rapport is often measured by subsections of teacher efficacy and support (Gibson, 2006). Mintzes (1980) examined teacher behaviors based on a two dimensional structure, developed in the study, of teacher quality and student-teacher rapport, suggesting that these two dimensions were at the forefront of student course ratings.

Of the most important aspects of teaching that should be measured by student course ratings, teacher rapport will be the emphasis of this study. Rogers and Webb (1991) claimed that an ethic of caring is an essential part in defining what is an effective teacher. Furthermore, rapport between student and teacher has been identified as one of two main factors to affect student course ratings (Cranton & Smith, 1986; Erdle, Murray, & Rushton, 1985; Frey, 1978), and therefore can be considered a valuable indicator for measuring teacher effectiveness. Lowman (1994) operationally defined interpersonal rapport somewhat differently from S&I to be an instructor's ability to communicate with a positive attitude, conduct themselves with a democratic leadership style, and to run the class in a manner that is predictable (i.e., the teacher is well prepared and organized). Furthermore, Kohlan (1973) found that teacher characteristics dealing with aspects of rapport were more stable over time than other course characteristics.

Teacher Rapport and S&I Background in Secondary

Student Course Ratings

Although there is no official policy on the importance of teacher rapport in S&I (Rogers, 2005) current practice would argue differently. This study assumes that teacher rapport is very important in S&I. The fact that over the past several years S&I has placed a considerable amount of time, effort, and money in developing scales that more or less measure teacher rapport in the classroom corroborates that. The history of student course ratings in S&I has been one of helping administration presumably monitor effective teaching as well as providing helpful information when making decisions on hiring and retention. A brief background on student course ratings in S&I illustrates that teacher rapport continues to be at the forefront of student course ratings in S&I.

Since 1912 S&I has made periodic efforts to increase the effectiveness of teaching through course assessment. One of the first attempts to increase teaching effectiveness was to implement assessment through merit ratings where teachers were awarded an increase in salary based upon student ratings, when given the necessary rating by their supervisor. However, in part due to concerns regarding the validity of these ratings, and in part from the firestorm of opposition that resulted, the use of such required assessment came to an end in 1969 (Elzey, 1998).

In 1964, a 53-item student's evaluation of seminary (SES) was implemented and revised to a 30-item evaluation tool by 1968 with the main purpose of assessing potential candidates for hire. Research with later revisions of these scales showed that it was inconclusive as to whether the scale measured teacher effectiveness (Richins, 1973).

Others confirmed this finding and further concluded that the measures were a generalized rating of whether students liked their teacher (Elzey, 1998; i.e., a rating reflecting teacher rapport). Considering teacher rapport to be important, several versions of this SES instrument were widely used throughout the educational system until 1991.

In 1991, an employee evaluation handbook for S&I was published that contained a more broad approach to teacher evaluation that included student ratings, administrative ratings, and teacher self-evaluation. However, even with all these various measures the student rating of teacher performance (i.e., teacher rapport) has dominated assessment efforts for one reason or another. With these attempts to implement effective forms of instructor evaluation, teachers have expressed various feelings both of mistrust and in some cases resentment toward student ratings of their teacher (Howell, 1995; Lunt, 1995; Maughan, 1994). Some research at the university level suggests that some teachers have become adamantly opposed to student ratings (Davis, 1995). Additionally, a meta-analysis on student ratings feedback suggested the need to improve the practical use of student feedback. Based on their own five criteria of which studies to include L'Hommedieu, Menges, and Brinko (1990) showed positive empirical evidence of student ratings feedback at the university level, but claimed that the feedback was modestly practical. Furthermore, although teachers are expected to use the results from these forms to help them improve their teaching, research in higher education questions whether this actually happens (Johnson, 2000; Kember, Doris, & Kwan, 2002).

S&I has sought to establish a student course rating instrument to measure teacher rapport that is both valid and useful to help improve teaching by employing discriminate

and convergent tests of validity together with student focus groups. However, research regarding potential confounds on reliability scores such as age, gender, GPA, and SES is lacking and therefore needs to be studied.

Attribution Theory: Dispositional and Situational Attributions

Many theories discuss the value of judging others in the light of how we perceive ourselves. Attribution Theory (Kelley, 1967; Kelley & Michela, 1980; Weiner, 1986) is particularly significant to this study as it helps explain, to a certain degree, how self-perceptions can influence one's own behavior, and the perceptions of the behavior of others. This theory is important in demonstrating how self-perceptions can potentially impact teacher ratings. However, it does not specifically address nor does it fully explain what might happen when students rate themselves just prior to rating their teacher.

Attribution theory suggests that people are constantly seeking to gain a better understanding of why they and others say and do certain things by identifying perceived causal determinants for both their own behavior and the behavior of others. This act is done in an effort to make their world both more predictable and controllable. Based on this theory behavior can be attributed either to situational factors (peer pressure, social expectations, etc.) or dispositional factors (attitudes, personality traits, etc.). It is important to note that individuals tend to possess more specific information about themselves and, therefore, tend to make self-attributions based on situational factors (i.e., there are various reasons I am behaving this way). Individuals who are observing someone else, lack such information, and therefore attributions towards others are based

more frequently on dispositional factors (i.e., that person is behaving that way because that is the type of person they are).

Heider (1958) was the first to suggest that individuals make attributions regarding behavior based on situational and dispositional factors. Kelley (1967) later suggested that the fundamental question people face when making attributions is whether something internal to the person caused the behavior or whether the behavior was a result of something external under a certain situation. Kelley (1972) was the first who explored the idea of how people decide to make attributions as being either internal or external in nature. Furthermore, Kelly and Michela (1980) operationally defined the attributions that people make as the attribution process. Weiner (1979) was the first who linked attribution theory to education, and suggested that a theory of motivation based on attributions can be identified along three dimensions that are applicable to a classroom setting: (a) stability (how stable the attribution is perceived over a period of time) (b) locus (perceived internal or external causal determinants for behavior), and (c) control (whether causal determinants are perceived controllable and uncontrollable). Further research also suggests that individuals use general principles to determine causality for behavior that derive from personal schemas and causal rules learned over a lifetime (Fiske & Taylor, 1991).

The *actor/observer perspective bias* under the attribution theory helps to explain the judgment processes that deal with how the rater perceives him/her self and how a rater perceives their teacher and vice versa, how the rater perceives their teacher and how the rater perceives him/her self. Although the actor/observer perspective bias does not

fully explain the phenomenon discussed in this study there are some elements that do explain it partially. This biasing factor suggests that an individual's attributions link causal reasons for personal behavior based on situational factors known only by the individual at that time (i.e., peer pressure, social norms, etc.), while attributing causal reasons for the behavior of others to be more dispositional in nature (i.e., personality trait, attitude, etc.), presumably because they are unaware of the majority of these influences. I suggest that by giving students an opportunity to attribute their own behaviors to situational factors as suggested by the actor/observer perspective bias, attributions made toward their teacher would then be less dispositional and thus more reliable. This research is the first to make an attempt to explain that a self-rating may impact a rating of others. Of the various biasing factors under the attribution theory, only the self-serving bias has been linked to student course ratings.

The self-serving bias suggests that an individual takes more responsibility for any success they may experience and denies any responsibility for failures. Griffin (2004) addressed the self-serving bias suggesting that students tend to punish their instructors with lower ratings when their grades were lower than students believed they earned. However, Gigliotti and Buchtel (1990) suggested that the self-serving bias has a minimal to non-existent effect on course evaluations. As previously mentioned, there has been no research suggesting a relationship between judging one's own behavior (which are typically situational attributions) and how that may influence attributions made toward others (which are typically dispositional).

Student Self-Assessment

As discussed previously self-assessment is widely used both in education and business management. When it comes to performance on the job it is helpful to better understand how the employee perceives their own performance in light of how their immediate supervisor perceives that performance to encourage improvement where needed. Self-assessment strengthens the value of multi-source evaluation where various others are given the opportunity to take part in the evaluation process, with the self-assessment at the focal point of the evaluations. One aspect of the evaluation process that has not been considered is how a self-assessment might affect one's perception of others. S&I has recently implemented student self-rating items that deal with their level of commitment using the term "student teachability" to identify the construct. This has been done in an effort to help students better understand their role in the learning process.

Student Self-Assessment in Education

Student self-assessment has been used to encourage personal growth and development in education. Students can be given opportunities to watch themselves learn, monitor and control their learning process and become active agents in learning not just passive recipients of information or rote participation (Anderson & Krathwohl, 2001; Annevirta & Vauras, 2006; Joseph, 2006; Kuiper, 2002; Williamson, 1996; Zimmerman & Martinez-Pons, 1992). Student self-assessment has a tremendous impact on helping students become more aware of their own learning process and how they can improve. Ongoing discussions continue to support the need for both teachers and students to share

the responsibility for the students' learning (Black, Harrison, Lee, Marshall, & William, 2004). Providing means for student self-assessment is one of many ways to help students take an active role in sharing the responsibility for their learning.

Doubts concerning the value and accuracy of self-assessments center on inflated perceptions and self-interest (Ross, 2006), suggesting that students with high ability consistently underrate themselves while low ability students frequently overrate themselves. However, Dochy, Segers, and Sluigsmans (1999) stated that accuracy in self-assessment does improve over time. Some question measurement of self-assessment, primarily in children, and believe that self-reports are invalid due to a deficient knowledge regarding performance (Assor & Connell, 1992).

High-ability versus low-ability students tend to attribute misconceived perceptions of their performance to different causes. Boud and Falchikov (1989) related findings of misconceived perceptions of ratings to the different abilities of the students by differentiating between good versus weak students, and further reported differences in the predictability of performance between students of higher level and lower level classes. Langendyk (2006) reported that low achieving students generously scored themselves and others (overrating), while higher achieving students were more harsh in their own self-assessments (underrating). As previously mentioned, graduation from S&I is based on an attendance policy requirement and an interview with ecclesiastical leadership. Because of this policy, students may tend to rate themselves with less influence from grades and course workload regarding their performance and effort.

Student learning has been reported to increase when students are taught what and

how to self-assess (Ross, 2006). As students are given opportunities to focus on what they know and how they think about what they know, their motivation for learning will improve (Pintrich & Schrauben, 1992). Self-assessment provides an opportunity to identify specific weaknesses in the learning process and to set goals to strengthen them (Costa & Kallick, 2004). One major point in self-assessment is the sense of accountability it brings to the learning process. Students tend to gain a broader perspective on the significance of their own effort in learning. Conversely, student attitudes toward learning can become apathetic and disengaged as they lose a sense of accountability (Hassel & Lourey, 2005). These attitudes can be changed through appropriate implementation of student self-assessment.

Through student self-assessment, a student's attention can be redirected to focus not only on *what* they have learned, but *how* they are learning it. Students can be given opportunity to watch themselves learn, monitor and control their learning process and become active agents in learning, not just passive recipients of information or rote memorizers (Anderson & Krathwohl, 2001; Annevirta & Vauras, 2006; Joseph, 2006; Kuiper, 2002; Pintrich & Schrauben, 1992; Williamson, 1996; Zimmerman & Martinez-Pons, 1992). Too often the student's role in the classroom is not even acknowledged in assessment practices (Nelson & Narens, 1996). Active, cognitive, and constructive processes in self-assessment have become a focus of current practices in encouraging meaningful learning (Anderson & Krathwohl, 2001; Weinberger & McCombs, 2003). Studies support the logic that through self-assessment students can gain introspection on how they learn, why they are learning, and what will be their next step in the learning

process (Son & Schwartz, 2002).

When students are well trained in the process of self-assessment the outcomes are predominantly positive. Overall, self-assessment contributes both to improved behavior and higher levels of student achievement. Ross (2006) stated, “Teachers who make a serious commitment to learning about self-assessment and teaching these techniques to their students can plausibly anticipate enhanced student motivation, confidence and achievement” (p. 10).

As previously mentioned the concept of self-assessment by judging one’s self and how one judges others has been a subject of discussion for thousands of years. However, implementing student self-assessment in education has come about more recently. Ross (2006) defined student self-assessment in the context of education as “the evaluation or judgment of the worth of one’s strengths and weaknesses with a view to improving one’s learning outcomes” (p. 1). Research concludes that overall the use of self-assessment in educational practice is positive (Dochy et al., 1999).

Comparisons Between Self-Ratings and Ratings of Others

One aspect of student course ratings that has received a lot of attention is the comparison between teacher self-ratings and ratings by others (i.e., student course ratings, peer ratings, and ratings by superiors). This aspect of rating others is also part of the management literature where self-ratings are compared with other ratings (i.e., subordinate ratings, peer ratings, and superior ratings). A significant amount of research has been conducted to broaden current understanding between teacher self-ratings and

ratings of others, both in education (Boud & Falchikov, 1989; Braskamp et al., 1979; Centra, 1973; Feldman, 1988, 1989), and business management (Atwater & Yammarino, 1992; Baird, 1977; Drory, 1988; Furnham & Stringfield, 1998; George & Smith, 1990; Heneman, 1974; London & Wohlers, 1991; Meyer, 1980; Reid & Levy, 1997).

The actor/observer perspective suggests that an individual's attributions link causal reasons for personal behavior to situational factors that are known only by the individual (i.e., peer pressure, social norms, personal problems, etc.), while attributing causal reasons for the behavior of others to be more dispositional in nature (i.e., personality trait, attitude, etc.), presumably because the individual doing the rating is unaware of similar external or situational influences in others. Norman (1953) showed promising evidence that when a person is aware of what his/her own personal characteristics are he/she will make fewer errors in perceiving others.

Over the past several years S&I has invested a considerable amount of time, money, and effort into achieving valid and reliable scores on student course ratings; and working to help students understand their role in the learning process and level of commitment to the learning process. Because research regarding comparisons between student ratings of teachers and student self-ratings on commitment would provide valuable information through student course ratings regarding issues of teaching and learning it needs to be studied.

A New Method of Administration for Student Course Ratings

A new and untested method of administering student course ratings is to

administer a student self-assessment prior to the student's rating of their teacher. I propose to examine whether student self-assessment administered prior to students' rating of teacher rapport has any impact on overall rating scores. I expect that by having students rate themselves first (focusing greater attention on self), the scores for the teacher rating will achieve greater reliability. Additionally, I expect that by having students rate their teacher first that this will impact how they rate themselves on their level of commitment. I propose that ratings of teacher rapport as perceived by students can predict a student's level of commitment as perceived by the student.

Conclusion

In conclusion, S&I values student course ratings and uses them for high stakes decisions; therefore, the organization has invested a considerable amount of time, money, and effort into achieving valid and reliable scores on student ratings of teacher rapport and student self-ratings on commitment. The perceived value and use of teacher rapport scores and student rating scores strengthen the true score of the student ratings of teacher rapport and self-ratings on commitment, thus helping administrators in S&I further encourage improved teaching and learning. Therefore, ensuring a significant relationship between teacher rapport scores and student commitment scores might be crucial to decision makers in S&I. However, research regarding comparisons between teacher rapport scores as perceived by the student and student self-ratings on commitment has not yet been considered and therefore needs to be studied.

Findings from a literature review and pilot study data lend evidence that

administering a student self-assessment prior to the teacher ratings will help achieve greater reliability in teacher rapport scores. As mentioned previously, various studies in education have looked at the relationship between teacher self-evaluations and student evaluations (Boud & Falchikov, 1989; Braskamp et al., 1979; Centra 1973; Marsh & Overall, 1979), and teacher evaluation of students and student self-evaluation (Olina & Howard, 2004), however, because none have looked at the relationship between student self-ratings on commitment and the students ratings teacher rapport this study has importance and the findings could contribute significantly in helping increase the reliability of rating scores, and strengthen the value of administering student self-ratings in conjunction with student ratings of their teacher and thereby help to resolve teacher evaluation issues within S&I, and this study may also contribute to the larger field of student course ratings.

CHAPTER III

METHODS

Purpose of Study and Research Questions

Seminaries and Institutes of Religion (S&I) has sought to establish a student course rating instrument that is both valid and informative to teaching through discriminate and convergent tests of validity together with student focus groups (Rogers, 2005); however, research regarding potential confounds on reliability scores such as teacher, course, and student characteristics is lacking in S&I and therefore needs to be studied. Furthermore, the impact of administering a student self-assessment immediately prior to a student rating of teacher has not fully been researched. A pilot test showed that student self-assessment prior to a student rating of teacher rapport yielded more reliable results as measured by Cronbach's alpha. Therefore, the purpose of this research is to expand on the pilot research and examine whether teacher characteristics, one course characteristic, student characteristics, impact teacher rapport ratings, and whether student self-assessment administered immediately prior to their rating of teacher rapport impacts student commitment ratings so that it can better predict teacher rapport. Specifically, this study sought to answer the following questions.

1. Does student self-assessment prior to the assessment of teacher rapport influence the assessment of teacher rapport?
2. Do teacher and course characteristics predict student perceptions of teacher rapport?

3. Do student characteristics predict self-report of student commitment?
4. Do student perceptions of teacher rapport predict self-report of student commitment? If so, does order of assessment matter?
5. Are reliability scores of student ratings of teacher-rapport different when students complete a self-assessment on commitment immediately prior to their rating of teacher rapport?

Independent, Dependent, and Moderating Variables

The independent variables for this study were a measure of student commitment, teacher characteristics, course characteristics, and student characteristics (see Figure 2). Student commitment is defined as an opportunity for reflection on levels of personal commitment. Student self-assessment on commitment can potentially impact students in becoming more aware of their own learning process, develop life-long learning skills, and how they can improve. The student self-assessment on commitment for this study consisted of eight items regarding a student's level of commitment (see Figure 2.)

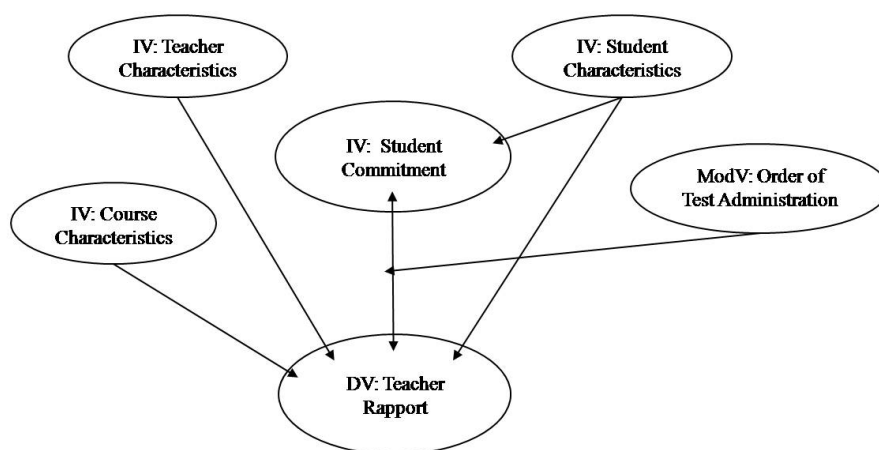


Figure 2. Independent, moderating, and dependent variables for study.

Teacher characteristics for this study were age, experience, supervisor estimate of rapport, supervisor estimate of course difficulty, and average (mean) grade. Teacher experience is defined as the number of years teaching. Each teacher received a rating of rapport by their supervisor on a three item scale (3 = high, 2 = medium, 1 = low). Each teacher also received a rating on course difficulty by their supervisor on a three item scale (3 = high, 2 = medium, 1 = low). The average (mean) grade is defined as a teacher's decision to award higher grades when grading students and was determined by gathering grades at the end of Term 2 of 2009-10 school year.

The course characteristic for this study was course workload/difficulty, which is defined as the difficulty level of work for the course of study (i.e., assignments, tests, etc.). Student characteristics were age, gender, grade level, years experience in seminary, academic proficiency, and precourse student interest. Age, gender, grade level, and experience were measured by having students respond to items regarding their grade level, gender, and experience (years in seminary). Academic proficiency was determined through self-perception of how well a student feels they do on tests and assignments in their school classes. Socioeconomic status was determined as it related to academic proficiency (i.e., this study did not solicit information from participants regarding socioeconomic status). Research shows evidence that academic achievement has a medium to strong correlation with SES (see Chapter II); therefore, we will use academic proficiency as it correlates with SES. Precourse student interest is defined as the level of interest a student reported during the course prior to taking the course.

The dependent variable for this study was a measure of teacher rapport as

perceived by the student. Good teacher rapport is defined by S&I as a relationship between the student and the teacher, where there is mutual trust and understanding supported by the following indicators: (a) A teacher who establishes good rapport makes students feel at ease (b) shows sincere interest in their lives (c) demonstrates love and respect, and (d) good rapport is reflected in interactions between students and teacher that are edifying or uplifting (personal communication, Seminaries and Institutes of Religion, September 10, 2008). Based on prior research teacher-student rapport is considered to be one of the most important constructs assessed by student course ratings (Cranton & Smith, 1986; Erdle et al., 1985; Frey, 1978).

The moderating variable for this study was the order of test administration. Two separate tests (teacher rapport and student commitment) will be administered in a different order, i.e., student commitment will be administered before teacher rapport in the first scenario, and then administered last in the second scenario.

Research Design

The research design was a correlational study with a posttest-only control group design comparing the results of teacher rapport ratings with teacher, course, and student characteristics as well as the impact of student self-assessment on the relationship between teacher rapport ratings and student commitment (see Figure 2.).

Population and Sample

S&I function within the Church Educational System (CES) of the LDS Church

providing religious education for secondary students between the ages of 14-18.

Released-time seminary allows students who have been released from their high school to receive instruction from S&I teachers with parental consent. In 2009, there were 354 released-time seminary programs, mostly in the western U.S., with 548 released-time seminary instructors (not counting administrators). The office of Research Evaluation and Assessment (REA) of S&I estimated approximately 115,787 students served by released-time seminary instructors. Released-time seminary is taught by salaried employees of the LDS Church.

The target population for this study was students who attend the released-time seminary program of S&I. This experiment was carried out as part of the normal course evaluation process, using approximately 1,000 secondary students attending three released-time seminaries located along the Wasatch Front in Utah. Twelve teachers were randomly selected from along the Wasatch Front. Participating teachers had on average between 125 and 150 students in the six classes they taught daily Monday through Friday. Students were between the ages of 14 and 18, participating in secondary education, and released from the school's care to the LDS Church's care for one class period.

Instrumentation

Currently, S&I combined both a teacher-rapport and student commitment scale into one. The six-item teacher rapport scale provides a student's perception of their teachers' level of rapport with them (see Figure 3). The eight-item student commitment

Teacher Rapport

1. **My teacher makes me feel comfortable talking with him/her.**
2. **My teacher shows sincere interest in what I am doing in my life.**
3. **My teacher shows love and respect to me.**
4. **My teacher teaches in a way that uplifts me.**
5. **My teacher earns the trust of the class.**
6. **My teacher shows that he/she understands teenagers.**

Student Commitment

1. **I have a positive attitude about seminary regardless of how many friends are in my class.**
2. **I put forth the effort needed to discover gospel truths in this class.**
3. **When I am invited to open my scriptures I gladly do so.**
4. **I always have a positive attitude about seminary.**
5. **If I feel bored in class ,I try to find a way to learn anyway.**
6. **I try hard to regularly study my scriptures outside of class.**
7. **I always try my best to pay attention in class.**
8. **In seminary I am always teachable no matter who is teaching me.**

Figure 3. Scale items for teacher rapport and student commitment.

scale provides a student's self-assessment on their level of commitment in seminary (see Figure 3). Level of commitment is defined as the degree to which students are participating in the learning process while attending a particular class. The assumption is that when a student reads an item on the teacher rapport scale-items, the item will elicit a rating based on that student's experiences interacting with that teacher. Similarly, items on the student commitment scale are presumed to elicit responses based on that student's own experiences with learning in the class. S&I office of REA has supported this assumption through interviews, focus groups, and so forth.

To examine the independent variables for teacher characteristics (teacher age,

teacher experience, supervisor estimate of rapport and course difficulty, average [mean] grade), student characteristics (academic proficiency, precourse student interest), and one course characteristic (student rating on course difficulty) students responded to a slightly adapted form of the Student Evaluation of Educational Quality (SEEQ). Specifically, three of the following four items were assessed on a 5-point Likert scale. Additionally, due to the unique attendance and grade policy of S&I, the fourth item had seven response options (see Figure 4).

Data Collection Procedures

In selected classrooms and during the time when evaluations are typically made seminary students were given one of two packets. Each packet contained two rating scales (a student self-assessment on commitment and a teacher rapport measure), one to be completed prior to the other in two different scenarios, during the same period in class (see Figure 5.). These scales were administered randomly within each class. After

1. Compared to other seminary classes, this class is...				
<input type="radio"/> Very difficult	<input type="radio"/> Difficult	<input type="radio"/> Neither	<input type="radio"/> Easy	<input type="radio"/> Very easy
2. The scores I receive on tests and assignments in my high school classes are...				
<input type="radio"/> Mostly A's	<input type="radio"/> Mostly B's	<input type="radio"/> Mostly C's	<input type="radio"/> Mostly D's	<input type="radio"/> Mostly F's
3. My level of interest in seminary prior to this class was...				
<input type="radio"/> Very low	<input type="radio"/> Low	<input type="radio"/> Neither	<input type="radio"/> High	<input type="radio"/> Very high
4. I expect to receive a ____ in this class". (The letter I indicates an incomplete grade due to attendance issues and the letter P indicates pass rather than a letter grade.)				
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> F
				<input type="radio"/> P
				<input type="radio"/> I

Figure 4. Items to measure student variables.

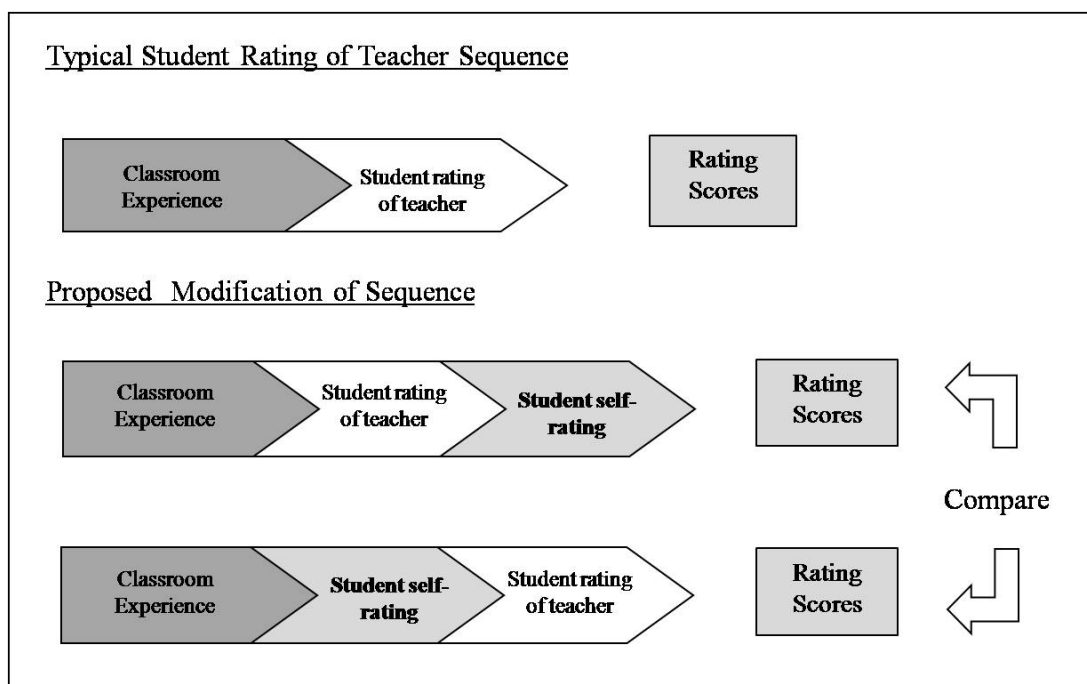


Figure 5. Sequence of test administration.

explaining the purpose of the study, students were asked to begin completing the rating scales. These rating scales are currently used by S&I, and were administered by this researcher, and sent to the S&I office of REA for scoring.

Data Analysis

The study involved nine analyses. These analyses sought to address the research questions, and provide a preview of a more extensive discussion in the findings section.

Analysis #1: Descriptive Statistics

These descriptive statistics summarized teacher characteristics, student characteristics, one course characteristic, teacher rapport, and student commitment for the whole sample as well as by experimental condition (see Table 1).

Table 1

Student Rating on Teacher Rapport and Student Self-Assessment on Commitment

Characteristics	Student rating on teacher rapport	Student self-assessment on commitment
Teacher	Experience, average (mean) grade, and supervisor rapport	Experience, average (mean) grade, and supervisor rapport
Student	Age, gender, precourse interest, and academic proficiency	Age, gender, precourse interest, and academic proficiency
Course	Course leniency (course difficulty)	Course leniency (course difficulty)

Descriptive analyses included frequency counts, percentages, means, and standard deviations. These descriptive statistics provided evidence about the generalizability of this sample.

Analysis #2: Test of Preassessment Differences

These analyses provided evidence to determine if groups were comparable. For example, observed differences in the study outcome might put one group at a disadvantage if that variable is related to teacher rapport. In addition, any initial between group differences for the independent variables would threaten the validity of the study treatment. This analysis informed research question 1 suggesting that the administration of a student self-assessment prior to the students rating of their teacher does have an impact on the teacher rating.

Analysis #3: Test for Covariates: Student Characteristics with Teacher Rapport

This analysis provided evidence concerning the relationship between student characteristics (i.e., age, gender, precourse student interest, expected grade and academic

proficiency), student commitment variables (student commitment scale items 1-8) and teacher rapport scores. Statistically significant correlations would show whether any student characteristics and student commitment variables correlated enough with the dependent variable. In addition, these relationships will be examined for the entire sample as well as by experimental condition.

Analysis #4: Test for Covariates: Teacher Characteristics with Teacher Rapport

This analysis provided evidence concerning the relationship between teacher characteristics (i.e., experience, average [mean] grade, and supervisor rapport) and teacher rapport scores. Statistically significant correlations would provide evidence that there is no significant relationship between these two variables. Nonsignificant correlations would show evidence that older, or more experienced teachers had no impact on teacher rapport scores. In addition, these relationships were examined for the entire sample as well as by experimental condition and will be discussed in chapter 4. This analysis informed research question 2 suggesting that teacher and course characteristics do not predict student perceptions of teacher rapport.

Analysis #5: Tests for Colinearity: Student Characteristics with Student Commitment

This analysis provided evidence concerning the relationship between student characteristics and student commitment. Statistically significant positive correlations would show evidence that student characteristics and student commitment are related. For example, a statistically significant positive correlation would show evidence that

students who rate themselves high on academic proficiency tended to rate themselves high on commitment. In addition, these relationships were examined for the entire sample as well as by experimental condition and will be discussed further in Chapter IV. This analysis informed research question 3 suggesting that student characteristics do predict student perceptions of their own commitment.

Analysis #6: Tests for Colinearity: Student Commitment

This analysis was conducted to determine if the three student commitment items (selected as covariates for later analyses) were collinear (redundant) thereby removing one to two of the variables from the analysis. This analysis showed evidence that these three student characteristic variables identified in analysis #3 are not collinear (redundant), and thus were not removed from later analyses.

Analysis #7: Analysis of Covariance: Teacher Rapport by Group with Covariates

This analysis provided evidence to determine if order of administration was related to student perceptions of teacher rapport while accounting for possible variables (covariates) indicating pre-assessment between group differences. This analysis informed research question 1 by suggesting that it does matter what order the tests are administered to their students although practical significance is minimal.

Analysis #8: Difference of Reliability: Cronbach's Alpha by Group

This analysis provided evidence concerning the difference in Cronbach's alpha

between the two test administration scenarios by testing the difference between two alpha coefficients. A significant difference in Cronbach's alpha would add evidence that test order of administration impacts the reliability of test scores. Cronbach's alpha was calculated for the entire sample as well as by experimental condition. This analysis informed research question 5 by suggesting there was a small difference between groups and practical significance was minimal.

**Analysis #9: Difference in Prediction:
Student Commitment with Teacher
Rapport by Group**

This analysis helped to determine if student commitment predicts teacher rapport differently if students self-assess first. This analysis informed research question 4 by showing evidence that one student commitment item (item 8) was a better predictor of teacher rapport when students were given the opportunity to rate themselves on their commitment before they rated their teacher on rapport.

CHAPTER IV

RESULTS

Research in education has looked at the relationship between teacher self-evaluations and student evaluations of teachers (Boud & Falchikov, 1989; Braskamp et al., 1979; Centra, 1973; Marsh & Overall, 1979), and teacher evaluation of students and student self-evaluation (Olina & Sullivan, 2004). However, none of these studies have examined the relationship between student self-ratings and those same students' ratings of teacher rapport. Since no data are currently available regarding the impact of student self-ratings on how they then rate their teacher or how this relationship might increase the reliability of teacher rapport scores, the aim of this chapter is to answer the study's five research questions. The results of a pilot study are reported and then the results of the nine analyses.

Pilot Study

While working for the S&I office of Research, Evaluation, and Assessment (REA), a pilot study was conducted to examine whether student self-rating on commitment in the course administered just prior to a student's rating of teacher rapport had any impact on ratings given. For this pilot study the rating scale was separated into two rating scales and administered sequentially by using two different orderings, one starting with eight items regarding student self-assessment on commitment and the other starting with six items regarding teacher rapport (see Appendices A and B). It was hypothesized that a prior self-assessment would impact the student's rating of teacher

rapport. This experiment was carried out as part of the normal course evaluation process using 163 released time seminary students taught by five different teachers at a released-time seminary located along the Wasatch Front. Student ratings came from classes of the same three teachers to better determine discrimination among items when comparing the scores between the two ordered administrations. There were three limitations to this pilot study. First, we did not control for moderating variables that the current study controlled for. Second, there was no control group (i.e., we did not randomize the administrations of the forms during each class). Third, we administered the scale items on the same instrument rather than separating them into two separate instruments.

Analysis suggested that reliability in the teacher ratings improved significantly when students were given an opportunity to rate themselves on their level of commitment prior to rating their teacher on rapport. This finding, over time, may have a significant impact on teachers' confidence in the effectiveness of student course ratings. Table 2 shows evidence for the overall improvement in reliability when a student self-evaluation is administered prior to a teacher rating. In essence, this lends evidence that administering a student self-assessment prior to teacher ratings may be one way to obtain more reliable teacher ratings.

Table 2

Measures of Cronbach's Alpha for Ordered Administrations on the Pilot Study

Order of administration	Overall	Self-first only	Comparison only
1. Teacher rating prior to student self-assessment on commitment (comparison)	0.86	0.77	0.9
2. Student self-assessment on commitment prior to a teacher rating (self-first)	0.91	0.9	0.93

Analysis #1: Descriptive Statistics Description of Main Study Sample

These descriptive analyses summarize teacher characteristics, student characteristics, and course characteristics, which include frequency counts, percentages, means, and standard deviations. These descriptive analyses' showed two things. First, the sample appears to be representative of the larger population, and second, many of these statistics informed later analyses.

Data presented in Table 3 summarize this sample of teacher and student characteristics. There was a wide range of teacher age and experience with mean scores suggesting this sample to be representative of the larger population of teachers along the Wasatch Front. For example, data from the population show that in February 2010 there

Table 3

Descriptive Statistics for Teacher Characteristics

Teacher ID#	Teacher age	Teacher experience	Average (mean) grade	Supervisor rapport	Supervisor course difficulty
11	28	2	3.4	1	1
9	30	2	3.6	2	2
1	34	10	3.4	2	3
15	59	3	3.4	3	2
8	36	9	3.5	1	1
2	37	7	3.3	3	1
13	43	20	3.2	2	3
14	47	20	3.1	1	3
10	47	22	3.2	1	1
12	50	25	2.5	3	3
4	58	35	3.6	1	1
5	59	32	3.4	3	3
	43	14.7	3.3	1.9	2.0

were 617 teachers along the Wasatch Front who ranged from 24 to 64 years of age, the average age of 39 years. Teachers from this sample ranged from 28 to 59 years of age with an average age of 43.

As another example of how this sample is representative of the larger population, the 617 teachers along the Wasatch Front teaching experience ranged from 4 months to 37 years in teaching experience with an average of 12 years experience. This sample showed that teacher experience ranged from 2-37 years, with an average experience of 14.7 years.

Information gathered for grade leniency is based on this researcher's experience of over 12 years teaching experience and administrative research in 8 different seminars along the Wasatch Front. As explained in the previous chapter, grade leniency is defined as a teacher's decision to give more A's when grading students than B's, C's, and D's, and was determined by gathering information about grades awarded by each teacher at the end of Term 2 of 2009-10 school year. The average (mean) grade for the population is estimated at 3.4. Teachers from this sample awarded mostly A's to their students showing an average (mean) grade of 3.3. The average (mean) grade was determined by weighting the grades on a scale from 1 to 4 (0 = F, 1 = D, 2 = C, 3 = B, 4 = A). In addition, teachers from this sample were rated by their supervisors on a 3-point scale (3 = high, 2 = medium, and 1 = low) for rapport and course difficulty (supervisor rapport and supervisor course difficulty). This sample shows supervisor perception of teacher rapport was 1.8, and course difficulty was 2.0, respectively. All teachers in the sample were male, corresponding to a total population of 580 males and 27 females.

Data presented in Table 4 summarize student characteristic of the sample showing an equal dispersion of gender (680 females and 706 males), and a somewhat even dispersion of age and experience (i.e., sophomores: 489; juniors: 510; and seniors: 391). These descriptive statistics for teachers and students indicated that the sample is representative of participants in LDS seminary.

Analysis #2: Test of Preassessment Differences

The intent of analysis #2 was to test whether any group differences between teacher, student, and course characteristics exist regardless of the study intervention. Any between group differences between teacher, student and course characteristics would

Table 4

Descriptive Statistics for Student Characteristics

Variable	<i>N</i>
Gender	
Female	680
Male	706
Total	1,386
Grade level	
Sophomore	489
Junior	510
Senior	391
Total	1,390
Experience	
1 st year	27
2 nd year	479
3 rd year	500
4 th year	379
Total	1,385

threaten the validity of this study's hypothesis, which posits that observed differences might be explained by the order of test administration and not other variables. To test for differences between groups on other variables that were not controlled for (i.e., teacher, student, and teacher characteristics), *t* tests were computed to compare mean data for the entire sample as well as by group.

Data presented in Table 5 summarize mean data for teacher, student, and course characteristics for the entire sample and between treatment groups (self-first and comparison). Mean data for teacher, student, and course characteristics show no significant differences both for the entire sample and between groups as indicated by nonsignificant *t* scores. The fact that there are no significant differences between groups to begin with rules out the possible influence of teacher, student, and course characteristics on the study treatment, and indicates that any potential differences between groups can be attributed with greater confidence to the study hypothesis (order of test administration).

An additional intent of analysis #2 was to test whether any between group differences existed between student commitment items 1-8 regardless of the study intervention. Statistics for eight student commitment items were computed to identify potential statistically significant differences between groups. Any differences between groups for the eight items of student commitment would threaten the validity of this study's observed outcome, by suggesting that the observed differences in the study outcome might put one group at a disadvantage if that variable is related to teacher rapport.

Table 5

Descriptive Statistics for Teacher, Student, and Course Characteristics

					Self-first		Comparison		
Variable	Grand mean	SD	N	Range	GM	SD	GM	SD	t score
Teacher characteristics									
Teacher experience	14.7	10.69	12	28-59	14.5	10.61	14.8	10.77	-.51
Supervisor estimate of rapport	1.8	.78	12	1-3	1.8	.78	1.8	.78	.37
Average (mean) grade	3.3	.30	12	2.5-3.6	3.3	.30	3.3	.30	.21
Student characteristics									
Precourse interest	3.7	1.11	1,385		3.7	1.12	3.7	1.10	-.42
Expected grade	3.6	.72	1,381		3.6	.74	3.6	.69	-1.2
Academic proficiency	3.4	.77	1,378		3.4	.78	3.4	.77	.55
Gender	.51	.50	1,386		.50	.50	.52	.50	-.50
Grade level	10.9	.80	1,391		11.0	.80	10.9	.79	.82
Course characteristics									
Supervisor course ease	2.0	.91	1	1-3	2.0	.91	2.0	.91	.84
Student course ease	3.4	.82	1,384	1-5	3.4	.81	3.5	.84	-1.8

Table 6 presents data showing between group differences for three variables from the student commitment scale (items 1, 5, and 6) to be statistically significantly different ($p < .05$). These initial between group differences on the measure of student commitment pose a threat to the internal validity of the study's observed outcome by. In other words, initial differences for the independent variable student commitment (items 1, 5, and 6) suggest that these differences explain some of the variance in addition to the study hypothesis, and therefore must be controlled for.

The effect of these three variables on the student commitment scale (items 1, 5, and 6) will be controlled for in later analysis through ANCOVA to potentially rule out their influence on the study's observed outcome. For all other variables, there were no significant between group differences (see Table 6).

Table 6

Descriptive Statistics for Student Commitment and Teacher Rapport by Group

Variable	<i>GM</i>	<i>SD</i>	<i>N</i>	Self-first		Comparison		<i>t</i> score
				<i>GM</i>	<i>SD</i>	<i>GM</i>	<i>SD</i>	
Student commitment								
Item 1	3.7	1.2	1,396	3.7	1.2	3.8	1.1	-2.6*
Item 2	3.6	1.1	1,396	3.6	1.1	3.6	1.1	-1
Item 3	3.9	1.2	1,396	3.8	1.2	3.9	1.1	-.73
Item 4	3.6	1.2	1,395	3.6	1.2	3.7	1.2	-.64
Item 5	3.2	1.3	1,394	3.1	1.3	3.3	1.3	-2.6*
Item 6	3.3	1.4	1,396	3.2	1.4	3.4	1.4	-2.1*
Item 7	3.7	1.1	1,396	3.7	1.1	3.8	1.1	-1.2
Item 8	3.5	1.2	1,394	3.5	1.2	3.6	1.2	-.72
Total student commitment	28.7	7.74	1,391	28.3	7.76	29.1	7.71	-1.91
Teacher rapport								
Item 1	4.2	1.0	1,395	4.2	1.0	4.1	1.0	2.2*
Item 2	4.1	1.1	1,394	4.1	1.0	4.0	1.1	1.4
Item 3	4.3	.91	1,395	4.3	.91	4.3	.91	1.4
Item 4	4.2	1.0	1,395	4.2	1.0	4.2	1.0	.12
Item 5	4.2	1.0	1,395	4.2	1.0	4.2	1.0	1.1
Item 6	4.1	1.1	1,393	4.1	1.1	4.0	1.1	1.9
Total teacher rapport	25.0	5.47	1,392	25.2	5.5	24.8	5.4	1.5

* $p < .05$

This led me to test for correlations between student characteristics and student commitment with teacher rapport to verify possible relationships between student commitment and teacher rapport. If these three variables (items 1, 5, and 6) correlate with teacher rapport (dependent variable) they can still be considered as effective covariates in an ANCOVA.

Analysis #3: Test for Covariates: Student Characteristics with Teacher Rapport

The previous analysis showed between group differences for student commitment irrespective of the study treatment (order of test administration). For this analysis, student characteristics and student commitment served as independent variables with teacher rapport serving as the dependent variable. Since student commitment items 1, 5, and 6 were identified as three potential covariates in the previous analysis and pose a threat to the study intervention, it is necessary to test for the influence of these covariates in subsequent analyses. This analysis expresses the degree to which student characteristics and student commitment can predict teacher rapport to verify student commitment items 1, 5, and 6 as effective covariates for later analysis through ANCOVA. To verify these covariates, correlations were computed both for student characteristics and student commitment with teacher rapport. Moderate to strong correlations for student characteristics and student commitment with teacher rapport would confirm the previous selection of student commitment items 1, 5, and 6 to be used as effective covariates.

Positive correlations would indicate that student characteristics (higher precourse interest, higher grade expectancy) are related to higher teacher rapport scores. Negative correlations would indicate that student characteristics (lower precourse interest, lower grade expectancy) are related to higher teacher rapport scores. This analysis will first look at correlations between student characteristics with teacher rapport followed by the correlations between student commitment and teacher rapport.

Student characteristics with teacher rapport findings from this analysis show a

weak to moderate significant correlation between student characteristics (precourse interest, grade expectancy, and academic proficiency) and teacher rapport (see Table 7). In other words, students who had high levels of interest in seminary, expected high grades in seminary, and who earned higher grades in their public school classes, also showed a tendency of rating their teacher higher on rapport. However, statistically significant positive correlations for academic proficiency are most likely due to the large sample size.

In addition, this analysis showed that gender and grade level were not correlated with teacher rapport, representing a strong discriminating effect from the other variables. In other words, the lack of correlation with gender and grade level suggested that whether the student was a sophomore or senior, male or female, had little effect on how students rated rapport with their teacher.

Student commitment with teacher rapport showed positive correlations indicating that higher ratings on student commitment item and total scores are related to higher teacher rapport scores. In other words, students who report higher levels of commitment

Table 7

Correlation Coefficients: Student Characteristics and Teacher Rapport

Student Characteristics	TR Item 1	TR Item 2	TR Item 3	TR Item 4	TR Item 5	TR Item 6	TR Total
Precourse interest	.26*	.25*	.28*	.27*	.18*	.22*	.27*
Expected grade	.28*	.29*	.30*	.31*	.21*	.25*	.30*
Academic proficiency	.09*	.10*	.09*	.08*	0.05	.06*	.09*
Gender	-.02	-.02	-.03	-.02	-.02	-.01	-.02
Grade level	-.04	-.08*	-.08*	-.11*	-.10*	-.09*	-.09*

Note. Teacher rapport is abbreviated as TR.

* $p < .05$.

to learning in seminary also rate their teacher more favorably on teacher rapport.

Negative correlations would indicate that lower student commitment items and total score are related to higher teacher rapport scores. In other words, students who rate themselves low on commitment to learning in seminary would rate their teachers more favorably on teacher rapport.

Data in Table 8 present statistically significant positive correlations found for all student commitment items and total score suggesting that students who give themselves higher scores on commitment tend to also rate their teacher more favorably on rapport. In addition, this analysis confirms that items 1, 5, and 6, are in fact different and correlated with teacher rapport. Since student commitment scores are high when students have rated their teacher on rapport first, and the previous analysis suggested that the groups were different to begin with on these three variables, an analysis of covariance will be used to control for that difference using student commitment items 1, 5, and 6 as covariates. Analysis 4 will conduct a similar test for correlations between teacher characteristics and teacher rapport to verify whether potential relationships exist between the two.

Analysis #4: Test for Covariates: Teacher Characteristics and Teacher Rapport

Similar to the previous analysis, this analysis looks at potential relationships between teacher characteristics and teacher rapport. Data presented in Table 9 summarize the relationships between teacher characteristics (i.e., age, experience, average [mean] grade, supervisor rapport, and supervisor course difficulty), one course characteristic

Table 8

Correlation Coefficients: Student Commitment and Teacher Rapport

Student commitment	TR Item 1	TR Item 2	TR Item 3	TR Item 4	TR Item 5	TR Item 6	TR Total
Item 1	.47*	.45*	.45*	.51*	.42*	.46*	.52*
Item 2	.43*	.41*	.42*	.46*	.37*	.40*	.47*
Item 3	.40*	.38*	.42*	.42*	.33*	.38*	.44*
Item 4	.52*	.50*	.53*	.55*	.47*	.48*	.57*
Item 5	.34*	.35*	.33*	.37*	.30*	.32*	.38*
Item 6	.32*	.31*	.33*	.36*	.26*	.29*	.35*
Item 7	.47*	.43*	.47*	.48*	.43*	.46*	.51*
Item 8	.36*	.33*	.36*	.40*	.32*	.34*	.39*
Total student commitment	.51*	.49*	.52*	.55*	.45*	.48*	.56*

Note. Teacher rapport is abbreviated as TR.

* $p < .05$.

Table 9

Correlation Coefficients Between Teacher Characteristics and Teacher Rapport

Teacher characteristics	TR Item 1	TR Item 2	TR Item 3	TR Item 4	TR Item 5	TR Item 6	TR Total
Teacher experience	-.03	-.01	0	-.04	-.01	-.07	-.32
Supervisor estimate of rapport	.20	.21	.19	.21	.24	.22	.24
Supervisor estimate of course difficulty	.04	.06	.06	.05	.03	.08	.06
Average (mean) grade	.04	.02	.05	.04	.02	.09	.05

Note. Teacher rapport is abbreviated as TR.

(course difficulty) and teacher rapport. Correlations were computed with teacher characteristics and the course characteristic serving as the independent variables and teacher rapport as the dependent variable.

This analysis expressed the degree to which teacher characteristics and one course characteristic can predict teacher rapport scores. Positive correlations would indicate that teacher characteristics such as older, more experienced teachers with higher supervisor ratings on rapport and higher supervisor ratings on course difficulty are related to higher teacher rapport scores. This would add evidence that teacher rapport is somewhat controlled by teacher and course characteristics and therefore the teacher rapport scale would not be measuring only rapport. Negative correlations indicate that younger, less experienced teachers with lower supervisor ratings on rapport and lower ratings on course difficulty are related to higher teacher rapport scores.

Findings show no statistically significant correlations between teacher/course characteristics and teacher rapport scores. These nonsignificant correlations suggest that teacher rapport is not controlled by experience of the teacher, age of the teacher, the grade awarded by the teacher (average [mean] grade), the supervisor ratings for teacher rapport, nor supervisor ratings of course difficulty. Teacher age has been omitted from Table 9 due to its high correlation with teacher experience (.97). These findings add evidence that teacher rapport, as measured by S&I, is independent of teacher characteristics measured in this study and that these instruments are measuring some aspect of teacher rapport. These findings also help to answer research question 2 by suggesting that teacher and course characteristics do not predict student perceptions of

teacher rapport. Although these findings add evidence that teacher rapport is not affected by teacher/course characteristics, these conclusions are not as strong as they could be due to the relatively small numbers of teachers in this sample ($n = 12$).

Analysis #5: Tests for Colinearity: Student Characteristics with Student Commitment

This analysis presents data regarding research question 3 in determining whether student characteristics predict self-report of student commitment. Data presented in Table 10 summarize the relationships between student characteristics and the student commitment scale items.

Correlations were computed with student characteristics serving as the independent variables and student commitment as the dependent variable. This analysis expressed the degree to which student characteristics can predict student commitment scores. Positive correlations would indicate that student characteristics (e.g., greater interest in seminary, higher grade expectancy, higher grades in public school classes,

Table 10

Tests for Colinearity: Student Characteristics with Student Commitment

Student characteristics	SC Item 1	SC Item 2	SC Item 3	SC Item 4	SC Item 5	SC Item 6	SC Item 7	SC Item 8	SC Total
Precourse interest	.55*	.56*	.55*	.55*	.42*	.49*	.52*	.46*	.64*
Expected grade	.47*	.54*	.49*	.46*	.36*	.49*	.49*	.39*	.57*
Academic proficiency	.14*	.24*	.26*	.15*	.16*	.25*	.20*	.17*	.25*
Gender	-.06*	-.11*	-.16*	-.05*	-.10*	-.11*	-.11*	-.08*	-.12*
Grade level	-.07*	-.08*	-.02	-.09*	-.04*	-.06*	-.07*	-.09*	-.08*

Note. Student commitment is abbreviated as SC.

* $p < .05$.

gender, and grade level) are related to higher student commitment scores. This positive correlation, if uncovered, would add evidence that student commitment is somewhat controlled by student characteristics and therefore the student commitment scale would not be measuring only student commitment. Negative correlations indicate that student characteristics (e.g., less interest in seminary, lower grade expectancy, lower grades in public school classes, gender, and grade level) are related to lower student commitment scores.

Statistically positive correlations were found for students' interest in the seminary prior to taking the course, the grade they expect, and their academic proficiency in their public school classes and items of student commitment. These findings would suggest that the level of interest prior to taking seminary, the expected grade, and academic proficiency are related to higher student commitment scores. Academic proficiency is only significant due to the large sample size and therefore practical significance is negligible. These findings regarding the relationship between student characteristic and student commitment are to be expected since students are the primary source of information.

Small correlations were found for the gender of the student, and statistically negative correlations were found for grade level of the student and items of student commitment. The fact that gender has a small correlation with commitment suggests that females tend to rate that they like seminary, by a small amount, more than males. In addition, statistically negative correlations with grade level suggest that the younger students tend to rate that they like seminary by a small amount more than older students.

However, these measures only account for less than one percent of the variance and thus, may not yield much practical significance. Findings from this analysis help to answer research question 3 by suggesting that some student characteristics can predict self-report of student commitment.

Analysis #6: Tests for Colinearity: Student Commitment

In previous analyses (numbers 1 and 2), student commitment items 1, 5, and 6 were identified as potential covariates for subsequent analysis through ANCOVA. Analysis number 6 tested for colinearity between these three items to determine whether all three variables were necessary for later analysis through ANCOVA, or if one was sufficient due to strong correlations. Data presented in Table 11 summarize relationships between items 1, 5, and 6, of the student commitment scale. Correlation coefficients were computed through a correlation analysis. This analysis expressed the degree to which these three items correlated to determine possible elimination of any of the three for later analysis. Strong correlations (i.e., larger than .70) would indicate the possible elimination of one or two of the three items because they would be explaining roughly 50% of the variance. Moderate to weak correlations would indicate that all three items could be included in later analysis because less variance would be explained.

Moderate correlations between student commitment items 1, 5, and 6, indicated that these three remaining candidates for covariation were not collinear (redundant), and thus all three could be included in later analyses. Therefore, correlations are not large

Table 11

Tests for Colinearity: Student Commitment

Student characteristic	Student commitment item 1	Student commitment item 5	Student commitment item 6
Student commitment item 1	1		
Student commitment item 5	.51*	1	
Student commitment item 6	.52*	.46*	1

* $p < .05$.

enough to suggest removal of any of the individual items from later analyses' given the large sample size and abundance of degrees of freedom.

**Analysis #7: Analysis of Covariance: Teacher Rapport by
Group with Covariates**

Analysis 2 and analysis 6 show that student commitment items 1, 5, and 6 are prime candidates for ANCOVA. This was because items 1, 5, and 6 correlate moderately with teacher rapport *and* because there was an initial difference in student commitment items 1, 5, and 6 when comparing the two groups (self-first and comparison). The intent of analysis number 7 is to see what happens when we control for the initial differences in student commitment items 1, 5, and 6. Any initial between group differences that existed regardless of the study treatment would threaten the validity of this study's hypothesis, which posits that observed differences might be explained by the order of test administration. In other words, if the differences in scores remain or increase after controlling for these moderating variables then this finding adds evidence that the order of test administration did make a difference.

Data presented in Table 12 summarize the relationships between groups on

Table 12

Analysis of Covariance: Teacher Rapport by Group with Covariates

Teacher rapport	Model		Covariates			Group <i>F</i>
	<i>F</i>	<i>R</i> ²	SC Item 1 (<i>F</i>)	SC Item 5 (<i>F</i>)	SC Item 6 (<i>F</i>)	
Item 1	114.7*	.25	168.9*	18.1*	6.8*	18.5*
Item 2	103.9*	.23	136.4*	26.6*	5.9*	11.1*
Item 3	114.6*	.25	171.0*	12.9*	10.8*	10.6*
Item 4	137.9*	.28	195.6*	21.9*	11.9*	3.7
Item 5	79.7*	.19	129.0*	16.5*	.83	6.5*
Item 6	100.7*	.22	166.7*	14.2*	2.6	13.3*
Total TR	146.1	.30	218.3*	24.9*	7.5*	13.8*

Note. SC is an abbreviation of student commitment and TR is an abbreviation of teacher rapport.

* $p < .05$.

teacher rapport scores before and after removing the influence of covariates (student commitment items 1, 5, and 6). Group means were compared with teacher rapport scores serving as the dependent variable and student commitment items 1, 5, and 6, serving as covariates. The R^2 values indicate that according to the model each item number on the teacher rapport scale roughly accounts for 25% of the variance. These findings confirm previous analyses 2 and 6 showing that student commitment items 1, 5, and 6, do contribute to the model and thus were appropriately selected as statistically significant effective covariates. Statistically significant F ratios indicated the ratio of variances between the two groups (self-first and comparison) and teacher rapport scores changed when the effects of the covariates (items 1, 5, and 6) were removed. In other words, after removing the influence of student commitment items 1, 5, and 6 more items on the teacher rapport scale (5 out of 6) show significant differences between groups than shown

in the previous analysis number 2. Recall that initial differences from analysis number 2 indicated a significant difference between groups for only one teacher rapport item (item 1).

Because statistically significant model F ratios were found for five out of six items on teacher rapport by group, it would suggest that the order of administration does have a statistically significant impact on student ratings of teacher rapport. In other words, having students self-assess their commitment prior to rating their teacher will yield higher teacher rapport scores for five out of the six items. Thus, I concluded for research question 1 that the order of administration does matter. However, practical significance was minimal because the findings were small.

Although the practical significance was minimal, further analysis shows the relationships between grand means for *each* teacher rapport item by order of test administration (self-first and comparison) by using adjusted means by group and adjusted mean differences. Adjusted means and adjusted mean differences were computed through ANCOVA with teacher rapport serving as the dependent variable. These adjusted means and mean differences between groups provide further understanding regarding how teacher rapport scores were affected by the order of test administration.

Findings indicated that when a student completes a self-rating on their level of commitment first, they are more likely to rate their teacher higher on rapport. For example, Table 13 shows that the grand mean for teacher rapport item 1 is 4.2 and when separated by group the mean for self-first is 4.2 and 4.1 for comparison. When adjusted through ANCOVA, the adjusted means show a significant mean difference between

Table 13

Analysis of Covariance: Grand Mean for Teacher Rapport by Group with Covariates

Teacher rapport	GM	Self-first		Comparison		Self-first adjusted mean	Comparison adjusted mean	Adjusted mean difference
		M	SD	M	SD			
Item 1	4.2	4.2	1.0	4.1	1.04	4.3	4.1	.21
Item 2	4.1	4.1	1.07	4.0	1.09	4.1	4.0	.17
Item 3	4.3	4.3	.92	4.3	.91	4.4	4.2	.14
Item 4	4.2	4.2	1.01	4.2	1.01	4.2	4.1	.09
Item 5	4.2	4.2	1.02	4.2	1.03	4.3	4.1	.13
Item 6	4.1	4.1	1.11	4.0	1.07	4.2	4.0	.19
Total	25.0	25.2	5.51	24.8	5.43	25.4	24.5	.92

groups, suggesting that for item 1 students were more likely to rate their teacher a Likert value of .21 higher (from 3 to 3.2), and that overall students were likely to rate their teacher a full point higher (24 to 25) when rating themselves first on commitment. However, practical significance is minimal because these differences are small and will be discussed in Chapter V. Findings from analyses 6 and 7 help to answer research question 1 by suggesting that student self-assessment prior to the assessment of teacher rapport does influence the assessment of teacher rapport.

Analysis #8: Difference of Reliability: Cronbach's Alpha by Group

Data presented in Table 14 summarizes the difference of reliability between groups in this study (order of test administration). Cronbach's alpha was computed for teacher rapport from each group to indicate a possible significant difference between groups. This analysis expressed the degree to which order of test administration might

Table 14

Difference of Reliability: Cronbach's Alpha by Group

Order of test administration	Cronbach's alpha
Self-first	.95
Comparison	.94

impact the reliability of teacher rapport scores.

Although, this finding corroborates the results of the pilot study, the size of the difference is much smaller, because the difference is small (.01 vs. .05 overall), practical significance is negligible. Findings from analysis number 8 help to answer research question 5 by suggesting that reliability scores for student ratings of teacher rapport are not significantly different when students complete a self-assessment on commitment just prior to their rating of teacher rapport.

**Analysis #9: Difference in Prediction: Student Commitment with
Teacher Rapport by Group**

Data presented in Table 15 summarize the relationships between items of the student commitment scale and items of the teacher rapport scale by order of test administration. Correlation coefficients were computed with items of the teacher rapport scale serving as the dependent variables and items of the student commitment scale serving as the independent variables. This analysis expressed the degree to which order of test administration (self-first and comparison) can predict teacher rapport. Statistically significant positive correlations would indicate that teacher rapport can be predicted by order of test administration. Statistically significant positive correlations were found

Table 15

Difference in Prediction: Correlations Between Student Commitment and Teacher Rapport by Group
(Self-First/Comparison)

Teacher rapport scale items 1-6	Student commitment scale items 1-8								SC total
	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	
Item 1	.45/.51	.43/.44	.42/.38	.50/.54	.32/.37	.35/.30	.48/.46	.41/.31*	.53/.51
Item 2	.46/.44	.42/.41	.42/.35	.48/.52	.34/.36	.33/.30	.47/.41	.39/.27*	.52/.48
Item 3	.48/.48	.42/.42	.43/.41	.52/.53	.32/.35	.35/.32	.49/.44	.42/.29*	.54/.50
Item 4	.50/.53	.43/.50	.42/.42	.54/.55	.34/.41	.35/.37	.49/.48	.44/.36	.55/.56
Item 5	.40/.44	.34/.39	.35/.31	.47/.48	.26/.35	.25/.26	.44/.41	.37/.27*	.45/.45
Item 6	.47/.46	.39/.42	.40/.36	.49/.49	.28/.37	.30/.28	.48/.44	.40/.29*	.50/.48
TR Total	.51/.54	.45/.49	.45/.42	.56/.59	.35/.42	.36/.35	.53/.50	.45/.34*	.58/.56

Note. Student commitment is abbreviated as SC and teacher rapport is abbreviated as TR.

* $p < .05$

for Student Commitment item number 8 and order of test administration. This would suggest that item 8 is a better predictor of teacher rapport when students self-assess first. Findings from this analysis help to answer research question 4 by suggesting that student perceptions of teacher rapport can be predicted when students complete a self-report of student commitment, and that the order of assessment does matter.

CHAPTER V

DISCUSSION

One of the best data sources for evaluating teacher quality is educational outcomes, such as achievement scores or student-produced products. For classes where outcomes are not well defined or are poorly assessed, observations of teacher behaviors through student course ratings provide the next best source of evaluation data. Student course ratings of teacher quality, although relatively easy to obtain, have questionable utility, since they only provide part of the picture. The questionable utility of student course ratings is especially true for elective classrooms where, at least in current practice, less student commitment is expected for course credit and graduation. Released-time seminary is a unique elective class where less student commitment or demonstrated performance is expected for high grades, credit, and graduation.

While some might view these conditions as a negative feature of S&I courses, they might also be seen as providing an opportunity for student growth uninhibited by grade policies and time expectations for advancement. Without the rigorous requirement for summative testing, rigorous grading, and predefined time expectations for advancement, S&I may have more latitude to incorporate student self-evaluation practices into their curriculum to promote students learning at their own pace. Additionally, this practice of student self-assessment may have a significant impact on the current practice of having students rate their teachers and upon how teachers react to those ratings.

Student self-assessment can provide helpful information to teachers and

administrators as well as help students monitor their own progress in learning. A significant body of research has been conducted to broaden current understanding between teacher or employee self-ratings and ratings of others, both in education and in business management (see literature review). What is not clear is whether students conducting self-assessment will allow the consideration of teacher behavior without general dispositional attributions. In line with the actor/observer perspective bias under the Attribution Theory, this study suggests that students are more likely to consider their own behaviors based on specific personal situational factors rather than basing these judgments on general dispositional factors that are often attributed to the behavior of others.

Purpose of Study and Research Questions

The purpose of this study was to explore a possible relationship between student, teacher, and course characteristics on student ratings of teacher rapport and explore a possible relationship between student self-assessments on commitment with student ratings on teacher rapport. Specifically, the research questions were as follows.

1. Does student self-assessment prior to the assessment of teacher rapport influence the assessment of teacher rapport?
2. Do student perceptions of teacher rapport predict self-report of student commitment? If so, does order of assessment matter?
3. Do teacher and course characteristics predict student perceptions of teacher rapport?

4. Do student characteristics predict self-report of student commitment?
5. Are reliability scores of student ratings of teacher-rapport different when students complete a self-assessment on commitment immediately prior to their rating of teacher rapport?

The short answer to these questions is that this study found that the order of test administration had a statistically significant effect on teacher ratings, that teacher and course characteristics do not predict teacher rapport, that some student characteristics can predict student commitment and teacher rapport, and that reliability scores of student ratings of teacher-rapport are affected when administering a student self-assessment immediately prior to student ratings of teacher-rapport, although the effects of these findings for reliability scores were too small to have much practical significance.

Review of Methodology

The independent variables for this study were student commitment, teacher characteristics, one course characteristic, and student characteristics. The dependent variable for this study was a measure of teacher rapport as perceived by the student. The research design was a correlational study with a posttest-only control group design comparing the results of teacher rapport ratings with teacher, course, and student characteristics as well as the impact of student self-assessment on the sequence of administration between student ratings of teacher rapport and student self-assessments on their commitment.

Summary of Major Findings

Order of Test Administration

The order of test administration had a statistically significant effect on teacher ratings of teacher rapport. There were two reasons that led me to conclude that the order of test administration had a significant effect on student ratings of teacher rapport. First, I found that there were statistically significant models, covariates, and group effects for most outcome variables. This result would suggest that having students self-assess their commitment to seminary prior to assessing teacher rapport was related to perceptions of better teacher rapport. Although all outcome results were statistically significant, practical significance was minimal and will require further research to establish any permanent effects. Second, I found evidence showing that one item from the student commitment scale (student commitment item 8) is a better predictor of teacher rapport when students are given the self-assessment on commitment prior to rating their teacher on rapport.

Statistically significant models, covariates, and group effects indicate that the order of test administration does have an impact on how students rate their teacher on rapport. Statistically significant model F ratios were found for five of the six items on the teacher rapport scale by group (comparing teacher rapport scores from each group), after removing the influence of pretreatment between group differences. This study's findings suggest that the order of administration (having student self-assess their commitment prior to rating their teacher) had a significant impact on student ratings of teacher rapport. This effect is small and each item on the teacher rapport scale roughly accounts for only

25% of the variance. One point of discussion is to look at why student commitment items 1, 5, and 6, showed statistically significant between group differences and why after removing items 1, 5, and 6 from the model teacher rapport scores were still significantly impacted by having students rate themselves first on commitment.

Findings show that student commitment item number eight was a better predictor of teacher rapport when students were allowed to assess themselves on their own commitment prior to rating their teacher on rapport. Item number 8 reads as follows, “In seminary I am always teachable no matter who is teaching me.”

These findings support my previous hypothesis using the actor/observer perspective bias to explain how students may perceive their teacher differently when allowed to self-assess first. Attribution theory suggests that individuals tend to attribute the behavior of others as dispositional while seeing their own behavior as situational. In other words, they might judge another person as stubborn or argumentative but excuse their own behavior as simply the result of their having a bad day, implying that under normal conditions they would have behaved differently. Since the actor/observer perspective bias suggests that students are more likely to consider their own behavior as nondispositional, I propose that by having students self-assess first, they will become more aware of how they judge their own behavior and thus rate their teacher differently. For example, when students respond to student commitment item number 8 they may consider their own behavior and become somewhat more aware of their role in the learning process, and thus impact their rating of the teacher. Findings from this study help to clarify whether students completing a self-assessment of their own level of

commitment (nondispositional) will allow the consideration of teacher behavior without dispositional attribution, thus providing a more thoughtful set of observations which could serve as a more discriminating evaluation. This finding addressed research questions 1 and 4.

Teacher and Course Characteristics

Teacher and course characteristics show no evidence in predicting teacher rapport. Course difficulty, teacher age, and teacher experience had little to no correlation with student ratings of teacher rapport. This would suggest that teacher rapport, as measured by S&I, is not controlled by student perceptions of the difficulty of the course, nor by the teacher's age and experience (i.e., number of years teaching). This finding addressed research questions 2.

Student Characteristics

Student characteristics show evidence in predicting teacher rapport. Student characteristics precourse interest (.27) and grade expectancy (.30) showed moderate correlations with student ratings of teacher rapport. Student characteristics academic proficiency (.09), gender (-.02) and grade level (-.09) showed no correlation with student ratings of teacher rapport. Student commitment items (1-8) show moderate to strong correlations with student ratings of teacher rapport. These findings add evidence that student perceptions on their own precourse interest, grade expectancy, and level of commitment to seminary can predict teacher rapport scores. In other words, students who reported a greater precourse interest in seminary, reported higher expected grades, and

rated themselves higher on commitment tended to rate their teacher higher on rapport.

This finding addressed research questions 3.

I determined that findings for research question 5 regarding how the reliability scores of student ratings of teacher rapport might have been different between groups (self-first and comparison) were inconsequential and therefore will not be discussed as a major finding for this study.

Interpretation of Findings

Teacher Rapport and Student Commitment

The practical significance of the relationship between teacher-rapport and student commitment by order of test administration is minimal. Study results indicated between group differences for three variables from the student commitment scale (items 1, 5, and 6) to be statistically significantly different ($p < .05$). These differences pose a threat to the internal validity of the study's observed outcome suggesting some of the difference between groups is explained by these three items on student commitment. Meaning, initial differences for the independent variable student commitment (items 1, 5, and 6) suggest that these differences explain some of the variance in addition to the study hypothesis, and therefore must be controlled for. After testing the effect of these three variables (student commitment items 1, 5, and 6) I was able to rule out their influence on the study's observed outcome (i.e., students completing a self-rating on their level of commitment has a statistically significant impact on their rating of teacher rapport).

In other words, differences found for order of test administration confirmed the

study outcome that when a student completes a self-rating first they are more likely to rate their teacher higher on rapport. I found a significant mean difference between groups suggesting that for teacher rapport item 1 students were more likely to rate their teacher a Likert value of .21 higher (from 3 to 3.2), and that overall students were likely to rate their teacher a full point higher (i.e., 24 to 25) when they rate themselves first on their level of commitment.

Another discussion point is to consider why teacher rapport item 1, “My teacher makes me feel comfortable talking with him/her” was statistically significantly different between groups. According to this study, intervention students’ perception of how comfortable their teacher made them feel talking with him/her was somewhat higher (from 4.1 to 4.2) after having rated themselves first on commitment. Furthermore, after removing the influence of student commitment items 1, 5, and 6 (which also showed statistically significant difference between groups pre-treatment with students rating themselves higher on commitment after having rated their teacher first) from the model there was still a significant effect on five out of the six teacher rapport items suggesting that it does matter whether students rate themselves first on commitment before they rate their teacher.

However, although findings show a statistical significant difference between teacher rapport scores from the self-first and comparison groups, the practical significance of this difference is rather miniscule. In other words, this is a real effect but it would seem to be too small to have any kind of real impact on administrative decisions or providing helpful feedback for teachers to improve their teaching. However, if a

threshold were set for student course ratings, those teachers who receive ratings near or at the threshold could be impacted. For example, if the threshold for probation or failure to make tenure was set and a teacher or professor was one point below or equal to that score, based on findings from this study, having students rate themselves on commitment prior to rating their teacher may put the teachers' score at the threshold or one point over.

Although the influence of student commitment items 1, 5, and 6 was ruled out for this study's outcome, one question that might be considered regarding the initial differences between groups is how these questions might be considered for further analysis. The items are written as follows: *Item 1*: I have a positive attitude about seminary regardless of how many friends are in my class; *Item 5*: If I feel bored in class, I try to find a way to learn anyway; *Item 6*: I try hard to regularly study my scriptures outside of class. The ways these items might be further assessed, combined, or modified to improve their predictive value is not clear at this time.

Analysis of each item indicates that Item 1 showed the strongest statistically significant difference on teacher rapport between groups of test administration (self-first and comparison). This would suggest that students' perception of their attitude being positive towards seminary regardless of how many friends they have in their class may have predictive value, but why this particular item records such a strong effect is not clear at this time. The question is whether this trait is important to administrators and teachers when compared with other items on the student commitment scale. Item 5 seems to have a similar or parallel meaning to Item 1 in that when students experience boredom and remain committed to learning they tend to rate their teacher more favorably.

Furthermore, a correlational analysis between teacher rapport items by group showed that Item 8 (*In seminary I am always teachable no matter who is teaching me*) indicated a significant effect in predicting Teacher Rapport. In other words, when a student perceives themselves as teachable or committed to learning regardless of who their teacher is, they tend to rate their teacher more favorably on rapport.

Relationship Between Teacher Characteristics and Teacher Rapport

Findings from this study led me to conclude that there was no significant relationship between teacher characteristics and teacher rapport. This study sought for any potential relationship between four teacher characteristics (age, experience, average (mean) grade, and supervisor ratings on rapport and course difficulty) and teacher rapport. Since teacher age and teacher experience were highly correlated (.97), teacher age was omitted from the analyses. When the correlation was run, the finding was of no statistical significance, a finding corroborated by Marsh (2007), who suggested that there is little evidence showing that teachers become either more or less effective by gaining experience over time.

Findings regarding the relationship between teacher characteristics and teacher rapport could be seen as a positive outcome by teachers and administrators in S&I by suggesting that teacher age, teacher experience, average (mean) grade, supervisor ratings on teacher rapport, and supervisor ratings on course difficulty have little to no impact on teacher rapport ratings. Students feel they have good rapport with their teacher regardless of their teacher's age, experience teaching, and leniency on grades (students do not think

that most lenient teachers have any better rapport than those who are more demanding). Evidence regarding the relationship between teacher characteristics and teacher rapport suggests that the teacher rapport scale is most likely measuring an interpersonal relationship between a student and a teacher that is not affected by teacher characteristics measured in this study.

Concerning the average (mean) grade note that teachers from this study gave mostly A's to their student, which appears to be fairly typical, based on my experience on eight different seminary faculties (see Table 16). Released-time seminary is an elective class where less student commitment is expected for course completion and graduation, i.e., they only need attend class. The grade policy in S&I is unique in that students cannot receive a failing grade in seminary regardless of whether they attend or not. When the attendance requirement is not met, they are given an incomplete and then encouraged to make it up to receive credit for the class. In addition "grades should not be used as a means for coercing or pressuring students to conform [to seminary rules or policies]" (Church Education System, 1994, p. 8). In public education, a mandatory grade requirement for completion and graduation seems to place varying degrees of pressure on teachers to help their students move through the learning process at a predetermined pace rather than the student's own pace, if they are progressing at a different rate. Furthermore, there is a tendency for teachers to teach to the test rather than focus on the learning process and allow some students the necessary time for adequate development of specific learning skills. Since S&I is promoting a greater focus on learning as well as teaching, and there are no standard requirements for grades to complete a course or

Table 16

Teacher Characteristics by Average Grade (Term 2 of 2010 School Year)

Teacher ID#	A's	B's	C's	D's	I's ^a	Mean	SD
9	113	29	2	0	5	3.6	.81
4	97	17	3	0	6	3.6	.94
8	117	20	2	0	15	3.5	1.21
11	106	35	0	0	15	3.4	1.18
15	106	40	7	0	12	3.4	1.10
5	53	34	8	0	3	3.4	.88
1	70	18	0	0	10	3.4	1.22
2	69	23	0	0	11	3.3	1.23
13	103	30	4	0	20	3.2	1.33
10	60	32	17	0	6	3.2	1.05
14	97	35	10	0	22	3.1	1.36
12	90	43	0	0	13	2.5	1.14
Total	1,184	374	53	0	67	3.4	1.10

Note. Weights by grade to calculate mean and standard deviation: A = 4.0; B = 3.0; C = 2.0; D = 1.0; I = 0.0

^aI = The letter I indicates an incomplete grade based on failure to meet attendance requirements

graduate, it may be beneficial for S&I to incorporate student self-evaluation practices into their curriculum.

Relationship Between Student Characteristics Level of Student Commitment

Findings regarding the relationship between student characteristics and level of student commitment from this study led me to conclude that although there are significant relationships, it was expected, as the students are the primary source for the data. In other words, all the survey data for this study was based on students' perceptions and therefore it is expected that these same students' characteristics would be correlated

with their perceptions on their own level of commitment. Although a students' age, grade level, gender, precourse interest, grade expectancy, and academic proficiency all correlate with their self-assessment on their level of commitment to learning in seminary, there is evidence to suggest that some of these characteristics deserve further attention.

The strongest prediction between student characteristics and student commitment is evident with the significantly positive correlation between a student's interest in seminary prior to taking the class and their level of commitment (.64), and the expected grade with their level of commitment (.57). Although it may not be of practical significance, a negative statistically significant correlation also show a tendency for females to rate themselves slightly higher on commitment than male students (-.12). Based on findings from this study it appears that a large majority of students (65%) who attend seminary along the Wasatch Front report a high to very high perception of their level of interest in taking seminary prior to the class they were currently attending (see Table 17).

Table 17

Descriptive of Student Characteristic: Precourse Student Interest

Student interest	N	Student rating on teacher rapport		Student self-assessment on commitment	
		Mean	SE	Mean	SE
Very low	58	21.8	1.1	21.1	1.3
Low	166	24.1	0.45	24.3	0.64
Neither	266	24.1	0.33	26.1	0.43
High	529	25.1	0.23	29.5	0.28
Very high	366	26.1	0.27	32.3	0.36
Total	1,385				

As I mentioned previously attendance is the only criteria upon which S&I determines course credit and seminary completion for students (i.e., policy does not allow teachers to withhold credit-based specific requirements that are part of a student's grade; Church Education System, 2001). In light of this policy, it is interesting that most students (71%) perceived themselves receiving high grades in seminary, and that teacher rapport ratings and self-ratings on commitment show a tendency to increase based on the grade they expect to receive (see Table 18). However, this perception may simply indicate that students see seminary more as class where less commitment is required to receive higher grades. If that perception is widespread, it suggests that the grade students expect may actually be more reflective of their attitude toward seminary and their ratings of teacher rapport than of their having completed the necessary requirements to receive a particular grade.

Table 18

Descriptive of Student Characteristic: Expected Grade

Expected grade	N	Student rating on teacher rapport		Student self-assessment on commitment	
		Mean	SE	Mean	SE
A	981	25.7	.16	30.4	.22
B	292	23.8	.37	25.6	.44
C	83	21.7	.77	21.6	.86
D	15	20.6	2.10	20.2	3.00
I	10	21.3	1.60	13.0	2.40
Total	1,381				

Relationship of the Current Study to Previous Research

Student course ratings have been a subject of great interest for many and concern for others over the past 80 years (predominantly at the university level). The concept of having students serve as a source of information through teacher ratings was first introduced to North American universities as far back as the mid-1920s (Doyle, 1983), and have since been the subject of several volumes of research. Arreola (2008) suggested that the bulk of the literature has come forth more recently over the last 30 years.

The bulk of research regarding student course ratings centers on the validity and utility of student course ratings and the information gathered through them (see Literature Review). One area of student rating research that deserves more attention is looking at possible relationships between self-ratings and ratings by others like peer ratings, or administrative ratings. In the Olin and Sullivan (2004) study student self-evaluation served as the dependent variable with the teacher ratings serving as the independent variable. This study investigated possible significant relationships between student self-evaluations and teacher evaluations of the student to measure how student learning might be impacted. There has been no research beyond this current study to investigate potential relationships between how students' self-evaluations might impact how they perceive aspects of teacher quality, like teacher rapport among others.

As mentioned in the literature review, a significant amount of research has been conducted to broaden current understanding between teacher self-ratings and ratings of others, both in education (Boud & Falchikov, 1989; Braskamp et al., 1979; Centra, 1973; Feldman, 1988, 1989), and business management (Atwater & Yammarino, 1992; Baird,

1977; Drory, 1988; Furnham & Stringfield, 1998; George & Smith, 1990; Heneman, 1974; London & Wohlers, 1991; Meyer, 1980; Reid & Levy, 1997). Within this body of research there is none that looks for potential relationships between student self-ratings and how such ratings might impact the students' ratings of their teacher. What is not clear is whether students conducting a self-assessment will vary their rating of their teacher by allowing the consideration of teacher behavior without general dispositional attributions as described above, since such ratings are partially explained by the actor/perspective bias under the attribution theory.

Based on the actor/observer perspective bias under the attribution theory individuals tend to attribute the behavior of others to be dispositional while attributing their own behavior to be more situational. This biasing factor suggests that an individual's attributions link causal reasons for personal behavior based on situational factors known only by the individual at that time (i.e., peer pressure, social norms, etc.), while attributing causal reasons for the behavior of others to be more dispositional in nature (i.e., personality trait, attitude, etc.), presumably because they are unaware of the majority of these influences that are happening in the life of the other person. I suggest that by giving students an opportunity to attribute their own behaviors to situational factors as suggested by the actor/observer perspective bias, attributions made toward their teacher would then be less dispositional and thus potentially more reliable. Although the actor/observer perspective bias does not fully explain the observed outcomes discussed in this study, there are some elements that explain it partially. This research is the first to make an attempt to explain that a self-rating may have a significant effect on the rating of

others. Of the various biasing factors under the Attribution Theory only the self-serving bias has previously been linked to student course ratings.

The self-serving bias suggests that an individual takes more responsibility for any success they may experience and denies any responsibility for failures. Griffin (2004) addressed the self-serving bias suggesting that students tend to punish their instructors with lower ratings when their grades were lower than students believed they earned. However, Gigliotti and Buchtel (1990) suggested that the self-serving bias has a minimal to nonexistent effect on course evaluations.

Over the past several years S&I has invested a considerable amount of time, money, and effort into achieving valid and reliable scores on student course ratings; and working to help students understand their role in the learning process and level of commitment to the learning process. Although findings from this study do suggest a statistically significant effect when students rate themselves prior to rating their teacher, the practical significance is minor and needs to be researched further.

Possible Scriptural Basis for the Observed Effect

Since I am currently working for the LDS church as a religious educator it seems fitting that I discuss one scriptural reference from the King James Version of the Bible (which was part of my motivation in understanding the process of conducting a self-rating prior to a teacher rating). The passage is found in two of the four Gospels, "...first cast the beam out of thine own eye; and then thou shalt see *clearly* to cast out the mote out of thy brother's eye" (St. Matthew 7:5, St. Luke 6:42). Advice from these biblical

sources and others is that individuals should judge and correct their own behavior before judging or condemning another person. The emphasis on seeing more clearly when judging the behavior of others was the impetus behind this effort to test for differences in teacher ratings after having one group of students rate themselves on their level of commitment prior to rating the teacher. It seems rather surprising that with the clear stress on self-assessment suggested in scriptural sources, that this would be the first such study to actually test for it.

Suggestions for Additional Research

I have six suggestions for further research that appear to emerge from this study. The student commitment scale and teacher rapport scale from this study had two open response options on each scale for students to further explain how they perceived their teacher and themselves (see Appendix A and B). First, I suggest that a qualitative analysis of such open-ended comments should be conducted to identify potential patterns between how students describe their teacher's effectiveness and how they described their own level of commitment in the course. In addition, comments could be analyzed to identify qualitative patterns between the student self-rating scores and students' ratings of their teacher scores with what students wrote concerning their commitment and their teacher's rapport.

Second, I suggest that S&I conduct research to measure the impact of implementing *assessment for learning* practices into course curriculum, and how consistent student self-evaluation might affect student ratings of teacher quality and

teacher rapport. One main emphasis of *assessment for learning* is to provide students with the opportunity to self-evaluate their own progress throughout the course of study. Because S&I does not require summative test scores or specific grades to determine course completion or graduation, this type of assessment may have greater potential in helping students develop their own learning skills. When compared with requirements placed on the public education system with summative test scores and the pressure that “no child is left behind,” S&I should be able to allow each student to progress at their own pace for learning urging “every child to press forward.” This emphasis means that students are taught to evaluate their own learning progress throughout the course of study and will have opportunity to make necessary adjustments to their mode and pace of learning without the pressure of passing a test for advancement or credit.

Third, I suggest that this study be replicated in the field of public education at the university level. Virtually every university in the U.S. and Canada are utilizing student course ratings to monitor teacher quality. Although, for this study practical significance was minimal measuring the impact of administering a student self-assessment prior to students’ rating on teacher rapport, findings may differ for measures of teacher quality in the field of public education. Though important, teacher rapport is somewhat vague when compared to more observable measures of teacher quality, such as explaining things clearly, class is well organized, and so forth. I suggest findings may be more significant when students rate their teacher on measures of quality rather than a measure of rapport.

Fourth, I suggest that S&I consider the implementation of student self-assessment practices as they relate to the fundamentals of training document entitled the Teaching

and Learning Emphasis. In 2003, S&I made a significant effort to more strongly emphasize the roles of both the teacher and student in the learning process (see Appendix C). Based on research regarding the positive impact student self-assessment practices can have on increasing student learning (see Literature Review), S&I seek might seek to further understand how student self-assessment practices can be implemented by using the fundamentals of this document for student self-assessment. One of the fundamentals explains that teachers and students should understand, identify, and apply doctrines and principles. If students are taught what (clear expectations) and how (self-assessment practices) to self-assess they are more likely to experience an increase in their learning (see literature review). For example, self-assessment would help students see whether they are able to identify key content, whether they understand that content, and how well they feel they applied what they learned. In addition, it is important to note that the very implementation of a student self-assessment process would suggest the importance of the student and their ability to acquire learning skills that will last beyond the classroom. We tend to “treasure what we measure.”

Fifth, I suggest that S&I might seek further knowledge regarding how teachers react to the implementation of student self-assessment practices. What impact would access to student commitment scores and open-ended comments have on teachers as they relate to the same students rating for that teacher. Knowing that students are getting an opportunity to experience self-evaluation might influence how teachers react to the student ratings of their own teaching, possibly leading to better reflection and self-evaluation on the teacher's part.

Sixth, I suggest that S&I might seek to further knowledge regarding self-reflection practices and how they might impact the students rating of their teacher. Self-reflection would be different from a self-assessment through a rating form in that students would be given the opportunity to reflect on their personal effort through writing. In light of the current study it would be interesting to make a group comparison between those who complete a student self-assessment on commitment prior to rating their teacher and those who complete a self-reflection exercise.

Assumptions and Delimitations

There are two assumptions and two delimitations to this study that should be acknowledged. The first key assumption is that the study relies entirely upon self-report, with an assumption of basic honesty on the part of student respondents. The second assumption is that the S&I seminary program has a unique culture that is different from secular education programs and therefore might lack relevance in the public education institution, or religious teaching provided by other faiths (see Appendix D). The first delimitation is that student course ratings predominantly occur in post-secondary institutions and not in secondary institutions, although that condition is not an accurate description of S&I practice at present. The second delimitation is that this study is limited to only one aspect of teacher quality (teacher rapport) and therefore begs the question as to how this process of test administration might affect ratings in other domains of education.

CHAPTER VI

CONCLUSION

One of the best data sources for evaluating teacher quality is educational outcomes, such as achievement or student produced products. Successful education, in large part, is determined by how well students can perform following the course of study and graduation. Standardized achievement testing and attendance requirements largely determine the success and educational future for students. Therefore, successful teaching and learning can largely be determined by measures of student achievement and performance outcomes.

For classes where outcomes are not well defined or are poorly assessed, observations of teacher behaviors through student course ratings provide the next best source of evaluation data. Even when educational outcomes are clearly defined, the student course ratings provide valuable information about student affect (i.e., feeling) toward the course and the teacher. Since 1912, S&I has made periodic efforts to increase the effectiveness of teaching through course assessment, primarily through student ratings. It appears that released time seminary is an educational system where specific learning outcomes are not well defined and expectations for learning are not consistently assessed. Since the primary source for determining S&I course credit and graduation is based solely on attendance requirements, seminary might be perceived by many students as a set of courses that require less commitment to receive credit. As previously discussed 65% of 1,385 students surveyed in this study indicated high to very high precourse interest in seminary, 71% of 1,381 students expected an A for a letter grade, and the 12

teachers from this study awarded 71% of 1,678 of their students an A for the second term of the 2009-2010 school year. Altering this pattern may be a challenge for S&I as its teachers and administrators make greater efforts to help students participate much more while they are in class by not only learning, but experiencing opportunities to teach as well. In other words, raising expectations for students to learn and teach may place S&I teachers in an awkward position. They may expect more from their students, but in the end, whether the student receives credit for a particular term or graduates is determined by almost entirely by the attendance policy.

However, without any additional criteria beyond attendance, it seems clear as to why teacher rapport is of such high interest to S&I administrators. As discussed previously in Chapter II, Rogers and Webb (1991) claimed that an ethic of caring is an essential part in defining what is an effective teacher. Furthermore, rapport between the student and their teacher has been identified as one of two main factors to affect student course ratings (Cranton & Smith, 1986; Erdle et al., 1985; Frey, 1978), and, therefore, should be considered a valuable indicator for measuring the effectiveness of S&I salaried teachers. Since S&I policy does not measure student outcomes such as achievement scores, effective teaching is measured by student ratings, classroom observations by peers and leaders, and personal growth plans discussed between the principal and teacher. Of all these approaches, student ratings seem to be the most prominent.

Student course ratings of teacher quality or rapport, although easy to obtain, have been seen to have questionable utility, at least in higher education settings (L'Hommedieu et al., 1990). One question might be what are S&I salaried teachers

expected to do with the information provided from student ratings of teacher rapport and student ratings of commitment? As discussed in Chapter II, S&I salaried teachers have expressed various feelings both of mistrust and in some cases resentment toward student ratings of their teacher (Howell, 1995; Lunt, 1995; Maughan, 1994). Perhaps highlighting this relationship between student self-ratings on commitment and student ratings of teacher rapport may have a positive effect on teachers' general attitudes toward student course ratings in S&I. Knowing that students have been given an opportunity to consider their own level of commitment to learning, teachers may react to and feel differently about how those same students perceive teacher rapport and effective teaching.

Based on findings from this study, showing a statistically significant effect on teacher rapport scores by having students conduct a self-rating on commitment just prior to the teacher rating, there may be more than one reason that S&I administrators might seek further understanding regarding this particular study outcome. Not only would students benefit from a greater focus on student learning through means of self-assessment and self-evaluation, but teachers may also react more positively to student ratings. It seems intuitive that we should be able to see others more *clearly* when we have taken an opportunity to examine our own selves first.

REFERENCES

- Addison, W. E., Best, J., & Warrington, J. D. (2006). Student's perceptions of course difficulty and their ratings of the instructor. *College Student Journal*, 40(2), 409-416.
- Aleamoni, L. M. (1987). Student rating myths versus research facts. *Journal of Personnel Evaluation in Education*, 1, 111-119.
- Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing*. New York, NY: Longman.
- Anglin-Bodrug, K. L. (2006). Student evaluation of high school preservice teachers: Rating accuracy, formative feedback, and concurrent validity. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 67(2-B), 1186.
- Annevirta, T., & Dauras, A. (2006). Developmental changes of metacognitive skill in elementary school children. *The Journal of Experimental Education*, 74(3), 195-226.
- Armstrong, J. S. (1996). Are student ratings of instruction useful? *American Psychologist*, 53, 1223-1224.
- Arreola, R. (2008, September). *What more than 80 years of research tell us about student ratings* Utah State University. Paper presented at the Provost Faculty Development and Diversity Lectures, Utah State University, Logan, UT.
- Assor, A., & Connell, J. P. (1992). The validity of students' self-reports as measures of performance affecting self-appraisals. In D. H. Schunk & J. L. Meece (Eds.), *Student perceptions in the classroom* (pp. 25-50). Hillsdale, NJ: Erlbaum.
- Astin, A. W. (1998). The changing American college student: Thirty-year trends, 1966-1996. *The Review of Higher Education*, 21(2), 115-135.
- Atwater, L. E., & Yammarino, F. J. (1992). Does self-other agreement on leadership perceptions moderate the validity of leadership and performance predictions? *Personnel Psychology*, 45(1), 141-164.
- Baird, L. S. (1977). Self and superior ratings of performance: As related to self-esteem and satisfaction with supervision. *Academy of Management Journal*, 20(2), 291-300.
- Beran, T., Violato, C., & Kline, D. (2007). What's the "use" of student ratings of instruction for administrators? One university's experience. *Canadian Journal of Higher Education*, 37(1), 27-43.

- Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2004). Working inside the black box: Assessment for learning in the classroom. *Phi Delta Kappan*, 86(1), 9-21.
- Boud, D., & Falchikov, N. (1989). Quantitative studies of student self-assessment in higher education: A critical analysis of findings. *Higher Education*, 18, 529-549.
- Braskamp, L. A., Caulley, D., & Costin, F. (1979). Student ratings and instructor self-ratings and their relationship to student achievement. *American Educational Research Journal*, 16(3), 295-306.
- Cashin, W. E. (1990). Students do rate differnt academic fields differently. *New Directions for Teaching and Learning*, 43, 113-121.
- Centra, J. A. (1973). Self-ratings of college teachers: A comparison with student ratings. *Journal of Educational Measurement*, 10(4), 287-295.
- Chandler, T. A. (1978). The questionable status of student evaluations of teaching. *Teaching of Psychology*, 5(3), 150-152.
- Church Education System. (1994). *Teaching the gospel: A handbook for CES teachers and leaders*. Salt Lake City, UT: Intellectual Reserve.
- Church Education System. (2001). *Employee guide*. Salt Lake City, UT: The Church of Jesus Christ of Latter-day Saints.
- Costa, A. L., & Kallick, B. (2004). *Assessment strategies for self-directed learning*. Thousand Oaks, CA: Corwin.
- Cranton, P. A., & Smith, R. A. (1986). A new look at the effect of course characteristics on student ratings of instruction. *American Educational Research Journal*, 23(1), 117-128.
- d'Apollonia, S., & Abrami, P. C. (1997). Navigating student ratings of instruction. *American Psychologist*, 52(11), 1198-1208.
- Darby, J. A. (2006). The effects of the elective or required status of courses on student evaluations. *Journal of Vocational Education and Training*, 58(1), 19-29.
- Davis, M. (1995, March). *Staging a pre-emptive strike: Turning student evluations of faculty from threat to asset*. Paper presented at the annual meeting of the Conference College Composition and Communication, Washington, DC.
- DeCanio, S. J. (1986). Student evaluations of teaching a multinomial logit approach. *Journal of Economic Education*, 17(3), 165-176.

- Dee, K. C. (2007). Student perceptions of high course workloads are not associated with poor student evaluations of instructor performance. *Journal of Engineering Education*, 92(1), 69-78.
- Dochy, F., Segers, M., & Sluigsmans, D. (1999). The use of self-, peer and co-assessment in higher education: A review. *Studies in Higher Education*, 24(3), 331-350.
- Doyle, K. O. (1983). *Evaluating teaching*. San Francisco, CA: New Lexington.
- Drory, A. (1988). Self versus superior assessment of social science research employees. *Employee Responsibilities and Rights Journal*, 1(4), 301-312.
- Elzey, R. F. (1998). *The construct validity of the principles of edification as measures of edifying teaching in the LDS Church Educational System* (Unpublished doctoral dissertation). Brigham Young University, Provo, UT.
- Erdle, S., Murray, H. G., & Rushton, J. P. (1985). Personality, classroom behavior, and student ratings of college teaching effectiveness: A path analysis. *Journal of Educational Psychology*, 77, 394 - 407.
- Everett, M. D. (1977). Student evaluations of teaching and the cognitive level of economics courses. *Journal of Economic Education*, 9, 100-103.
- Felder, R. M. (1992). What do they know, anyway? *Chemical Engineering Education*, 26(3), 134-135.
- Feldman, K. A. (1978). Course characteristics and college students' ratings of their teacher. *Research in Higher Education*, 9, 199-242.
- Feldman, K. A. (1988). Effective college teaching from the students' and faculty's view: Matched or mismatched priorities? *Research in Higher Education*, 28(4), 291-344.
- Feldman, K. A. (1989). Instructional effectiveness of college teachers as judged by teachers themselves, current and former students, colleagues, administrators, and external (neutral) observers. *Research in Higher Education*, 30(2), 137-194.
- Fiske, S., & Taylor, S. (1991). *Social cognition*. New York, NY: McGraw-Hill.
- Frey, P. W. (1978). A two-dimensional analysis of student ratings of instruction. *Research in Higher Education*, 9, 69-91.
- Furnham, A., & Stringfield, P. (1998). Congruence in job-performance ratings: A study of 360 feedback examining self, manager, peers, and consultant ratings. *Human Relations*, 51(4), 517-530.

- Geobel, B. L., & Cashen, V.M. (1979). Age, sex and attractiveness as factors in students ratings of teachers: A development study. *Journal of Educational Psychology*, 71(5), 646-653.
- George, D. I., & Smith, M. C. (1990). An empirical comparison of self-assessment and organizational assessment in personnel selection. *Public Personnel Management*, 19(2), 175-190.
- Germain, M.-L., & Scadura, T. A. (2005). Grade inflation and student individual differences as systematic bias in faculty evaluations. *Journal of Instructional Psychology*, 32(1), 58-67.
- Gibson, D. (2006). *The association of students' academic efficacy, achievement goal orientation, and teacher rapport with disruptive behavior in the classroom*. New York, NY: St. John's University.
- Gigliotti, R. J., & Buchtel, F. S. (1990). Attributional bias and course evaluations. *Journal of Educational Psychology*, 82(2), 341-351.
- Greenwald, A. G. (1997). Validity concerns and usefulness of student ratings of instruction. *American Psychologist*, 52(11), 1182-1186.
- Greenwald, A. G., & Gillmore, G. M. (1997). Grading leniency is a removable contaminant of student ratings. *American Psychologist*, 52(11), 1209-1217.
- Griffin, B. W. (2004). Grading leniency, grade discrepancy, and student ratings of instruction. *Contemporary Educational Psychology*, 29, 410-425.
- Hamermesh, D. S., & Parker, A. M. (2003). Beauty in the classroom: Professors' pulchritude and putative pedagogical productivity. *NBER Working Paper Series*. Retrieved from <http://www.nber.org/papers/w9853>
- Hassel, H., & Lourey, J. (2005). The dea(r)th of student responsibility. *College Teaching*, 53(1), 2-13.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York, NY: Wiley.
- Heneman, G. I. (1974). Comparisons of self- and superior ratings of managerial performance. *Journal of Applied Technology*, 59(5), 638-642.
- Howell, G. B. (1995). *Teacher evaluation: An examination of the congruence of purpose and practice in the L.D.S. Church Educational System* (Unpublished doctoral dissertation). University of Arizona, Tucson.
- Johnson, R. (2000). The authority of the Student Evaluation Questionnaire. *Teaching in Higher Education*, 5(4), 419-434.

- Joseph, N. (2006). Strategies for success: Teaching metacognitive skills to adolescent learners. *The NERA Journal*, 42(1), 33-39.
- Kelley, H. H. (1967). Attribution theory in social psychology. In D. Levine (Ed.), *Nebraska symposium on motivation* (Vol. 15, pp. 192-238). Lincoln, NE: University of Nebraska Press.
- Kelley, H. H. (1972). Causal schemata and the attribution process. In D. Jones, H. H. Kelley, R. Nisbett, S. Valins, & B. Weiner (Eds.), *Attribution: Perceiving the causes of behavior* (pp. 151-174). Morristown, NJ: General Learning.
- Kelley, H. H., & Michela, J. L. (1980). Attribution theory and research. *Annual Review of Sociology*, 31, 457-501.
- Kember, D. L., Doris Y. P., & Kwan, K. P. (2002). Does the use of student feedback questionnaires improve the overall quality of teaching? *Assessment and Evaluation in Higher Education*, 27(5), 411-425.
- Kierstead, D., & D'Agostino, H. (1988). Sex role stereotyping of college professors: Bias in students' ratings of instructors. *Journal of Educational Psychology*, 80(3), 342-344.
- Kohlan, R. G. (1973). A comparison of faculty evaluations early and late in the course. *The Journal of Higher Education*, 44(8), 587-595.
- Kuiper, R. (2002). Enhancing metacognition through the reflective use of self-regulated learning strategies. *The Journal of Continuing Education in Nursing*, 33(2), 78-87.
- L'Hommedieu, R., Menges, R., & Brinko, K. (1990). Methodological explanations for the modest effects of feedback from student ratings. *Journal of Educational Psychology*, 82(2), 232-240.
- Landy, D., & Sigall, H. (1974). Beauty is talent: Task evaluation as a function of the performer's physical attractiveness. *Journal of Personality and Social Psychology*, 29(3), 299-304.
- Langendyk, V. (2006). Not knowing that they do not know: Self-assessment accuracy of third year medical students. *Medical Education*, 40(2), 173-179.
- London, M., & Wohlers, A. J. (1991). Agreement between subordinate and self-ratings in upward feedback. *Personnel Psychology*, 44(2), 375-390.
- Lowman, J. (1994). Professors as performers and motivators. *College Teaching*, 42(4), 137.

- Lunt, R. K. (1995). *The reliability of measurements of teacher and administrator performance in the LDS Church Educational System* (Unpublished doctoral dissertation). Brigham Young University, Provo, UT.
- Marsh, H. W. (1982). SEEQ: A reliable, valid, and useful instrument for collecting students' evaluations of university teaching. *British Journal of Educational Psychology*, 52, 77-95.
- Marsh, H. W. (1983). Multidimensional ratings of teaching effectiveness by students from different academic settings and their relation to student/course/instructor characteristics. *Journal of Educational Psychology*, 75, 150-166.
- Marsh, H. W. (1984). Students' evaluations of university teaching: Dimensionality, reliability, validity, potential biases, and utility. *Journal of Educational Psychology*, 76, 707-754.
- Marsh, H. W. (2007). Do university teachers become more effective with experience? A multilevel growth model of students' evaluations of teaching over 13 years. *Journal of Educational Psychology*, 99, 775-790.
- Marsh, H. W., & Cooper, T. L. (1981). Prior subject interest, students' evaluations, and instructional effectiveness. *Multivariate Behavioral Research*, 16, 83-104.
- Marsh, H. W., & Overall, J. U. (1979, April). *Validity of students' evaluations of teaching: A comparison with instructor self-evaluations by teaching assistants, undergraduate faculty, and graduate faculty*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Marsh, H. W., & Overall, J. U. (1998). Reflections on the effective study of college teaching and student ratings: One continuing quest and two unresolved issues. *Research in Higher Education*, 10, 139-147.
- Marsh, H. W., & Roche, L. A. (1997). Making students' evaluations of teaching effectiveness effective: The critical issues of validity, bias, and utility. *American Psychologist*, 52(11), 1187-1197.
- Mason, P. M., Steagall, J. W., & Fabritius, M. M. (1995). Student evaluations of faculty: A new procedure for using aggregate measures of performance. *Economics of Education Review*, 14(4), 403-416.
- Maughan, D. M. (1994). *Teachers' attitudes toward accountability in a religious education setting* (Unpublished doctoral dissertation). Arizona State University, Tempe, AZ.
- McKeachie, W. J. (1979). Student ratings of faculty: A reprise. *Academe*, 65, 384-397.

- McKeachie, W. J. (1997a). Good teaching makes a difference - and we know what it is. In J. C. Smart, & R. P. Perry (Eds.), *Effective teaching in higher education: Research and practice* (pp. 396-408). New York, NY: Agathon.
- McKeachie, W. J. (1997b). Student ratings: The validity of use. *American Psychologist*, 52(11), 1218-1225.
- Meyer, H. H. (1980). Self-appraisal of job performance. *Personnel Psychology*, 33(2), 291-295.
- Mintzes, J. J. (1980). Overt teaching behaviors and student ratings of instructors. *The Journal of Experimental Education*, 48(2), 145-153.
- Nelson, T. O., & Narens, L. (1996). Why investigate metacognition? In J. Metcalfe, & A. P. Shimamura (Eds.), *Metacognition: Knowing about knowing* (pp. 1-25). Cambridge, London: MIT Press.
- Norman, R. D. (1953). The interrelationships among acceptance-rejection, self-other identity, insight into self, and realistic perception of others. *Journal of Personality*, 37, 205-235.
- Olina, Z., & Sullivan, H. J. (2004). Student self-evaluation, teacher evaluation, and learner performance. *Educational Technology Research and Development*, 52(3), 5-22.
- Olina, Z. S., & Howard, J. (2004). Student self-evaluation, teacher evaluation, and learner performance. *Educational Technology Research and Development*, 52(3), 5-22.
- Olivares, O. J. (2001). Student interest, grading leniency, and teacher ratings: A conceptual analysis. *Contemporary Educational Psychology*, 26(3), 382-399.
- Ory, J. C. (2001). Faculty thoughts and concerns about student ratings. *New Directions for Teaching and Learning*, 87, 3-13.
- Pintrich, P. R., & Schrauben, B. (1992). Students' motivational beliefs and their cognitive engagement in classroom academic tasks. In D. H. Schunk & J. L. Meece (Eds.), *Student perceptions in the classroom* (pp. 149-183). Mahwah, NJ: Erlbaum.
- Reid, P., & Levy, G. (1997). Subordinate appraisal of managers: A useful tool for the NHS? *Health Manpower Management*, 23(2), 68-72.
- Richins, J. A. (1973). *Reliability of an instrument for evaluating teacher effectiveness*. Provo, UT: Brigham Young University.
- Rogers, D., & Webb, J. (1991). The ethic of caring in teacher education. *Journal of Teacher Education*, 42(3), 173-181.

- Rogers, E. P. (2005). *Scale construction and halo effect in secondary student ratings of teacher performance* (Unpublished doctoral dissertation). Brigham Young University, Provo, UT.
- Ross, J. A. (2006). The reliability, validity, and utility of self-assessment. *Practical Assessment, Research and Evaluation*, 11(10), 1-13.
- Sadoski, M., & Sanders, C. W. (2007). Student course evaluations: Common themes across courses and years. *Medical Education Online*, 12, 1-9.
- Scullen, S. E., Mount, M. K., & Goff, M. (2000). Understanding the latent structure of job performance ratings. *Journal of Applied Psychology*, 85(6), 956-970.
- Simpson, P. M., & Siguaw, J. A. (2000). Student evaluations of teaching: An exploratory study of the faculty response. *Journal of Marketing Education*, 22(3), 199-213.
- Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, 75(3), 417-453.
- Son, L. K., & Schwartz, B. L. (2002). The relation between metacognitive monitoring and control. In T. J. Perfect, & B. L. Schwartz (Eds.), *Applied metacognition* (pp. 15-38). Cambridge, MA: Cambridge University Press.
- Spooren, P., & Mortelmans, D. (2006). Teacher professionalism and student evaluation of teaching: will better teachers receive higher ratings and will better students give higher ratings? *Educational Studies*, 32(2), 201-214.
- Sproule, R. (2000). Student evaluation of teaching: A methodological critique of conventional practices. *Education Policy Analysis Archives*, 8(50), 1-23.
- Stanfel, L. E. (1995). Measuring the accuracy of student evaluation of teaching. *Journal of Instructional Psychology*, 22(2), 117-126.
- Stiggins, R. J. (1998). *Classroom assessment for student success*. Washington, DC: National Education Association.
- Stiggins, R. J. (1999). Assessment, student confidence, and school success. *Phi Delta Kappan*, 81(3), 191-199.
- Theall, M. (2001). Can we put precision into practice? Commentary and thoughts engendered by Abrami's 'improving judgments about teaching effectiveness using teacher rating forms'. *New Directions for Institutional Research*, 2001(109), 89.

- Theall, M., & Feldman, K. A. (2008). Commentary and update on Feldman's (1997) "identifying exemplary teachers and teaching: Evidence from student ratings." In R. Perry & J. Smart (Eds.), *The scholarship of teaching and learning in higher education: An evidence-based perspective* (pp. 130-143). Dordrecht, The Netherlands: Springer.
- Trout, P. (2000). Flunking the test. *Academe*, 86(4), 58-62.
- Vos, H. (2000). How to assess for improvement of learning. *European Journal of Engineering Education*, 25(3), 227-233.
- Wagenaar, T. C. (1995). Student evaluation of teaching: Some cautions and suggestions. *Teaching Sociology*, 23(1), 64-68.
- Weinberger, E., & McCombs, B. L. (2003). Applying the LCPs to high school education. *Theory Into Practice*, 42(2), 117-126.
- Weiner, B. (1979). A theory of motivation for some classroom experiences. *Journal of Educational Psychology*, 71(1), 3-25.
- Weiner, B. (1986). *An attributional theory of motivation and emotion*. New York, NY: Springer-Verlag.
- Williamson, R. A. (1996). Self-questioning: An aid to metacognition. *Reading Horizons*, 37, 30-47.
- Wilson, R. (1998). New research casts doubt on value of student evaluations of professors. *The Chronicle of Higher Education*, A12-A14.
- Zimmerman, B. J., & Martinez-Pons, M. (1992). Perceptions of efficacy and strategy use in the self-regulation of learning. In D. H. Schunk & J. L. Meece (Eds.), *Student perceptions in the classroom* (pp. 185-207). Mahwah, NJ: Erlbaum.

APPENDICES

Appendix A
Teacher Rapport Rating Form

Teacher Rapport Rating Form

THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

SEMINARIES AND INSTITUTES OF RELIGION

Instructions: Based on what you have experienced in your current seminary class, please indicate your responses to the items below by completely filling in the circle with a dark pen or pencil like this: ●. Your responses will be kept anonymous so do not put your name on the form. Your answers should be kept private.

1. Gender <input type="radio"/> Male <input type="radio"/> Female 2. Year in Seminary <input type="radio"/> 1 st year <input type="radio"/> 2 nd year <input type="radio"/> 3 rd year <input type="radio"/> 4 th year 3. Grade Level <input type="radio"/> Freshman <input type="radio"/> Sophomore <input type="radio"/> Junior <input type="radio"/> Senior	Disagree	Slightly Agree	Mostly Agree	Agree	Completely Agree
1. My teacher makes me feel comfortable talking to him/her.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. My teacher shows sincere interest in what I am doing in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. My teacher shows love and respect to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. My teacher teaches in a way that uplifts me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. My teacher earns the trust of the class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. My teacher shows that he/she understands teenagers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Things my teacher does well in class					
8. Things my teacher could do better in class					

Appendix B

Student Commitment Rating Form

Student Commitment Rating Form

THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

SEMINARIES AND INSTITUTES OF RELIGION

Instructions: Based on what you have experienced in your current seminary class, please indicate your responses to the items below by **completely filling in the circle with a dark pen or pencil like this: ●**. Your responses will be kept anonymous so do not put your name on the form. Your answers should be kept private.

1. Gender <input type="radio"/> Male <input type="radio"/> Female 2. Year in Seminary <input type="radio"/> 1 st year <input type="radio"/> 2 nd year <input type="radio"/> 3 rd year <input type="radio"/> 4 th year 3. Grade Level <input type="radio"/> Freshman <input type="radio"/> Sophomore <input type="radio"/> Junior <input type="radio"/> Senior	Disagree	Slightly Agree	Mostly Agree	Agree	Completely Agree
1. I have a positive attitude about seminary regardless of how many friends are in my class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I put forth the effort needed to discover gospel truths in this class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. When I am invited to open my scriptures, I gladly do so.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I always have a positive attitude about seminary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. If I feel bored in this class, I try to find a way to learn anyway.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I try hard to regularly study my scriptures outside of class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I always try my best to pay attention in class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. In seminary, I am always teachable no matter who is teaching me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Things I do well in class					
10. Things I could improve on in class					

Appendix C

Teaching and Learning Emphasis

TEACHING AND LEARNING EMPHASIS



The objective of seminaries and institutes of religion includes the following:

*O*ur purpose is to help youth and young adults understand and rely on the teachings and Atonement of Jesus Christ, qualify for the blessings of the temple, and prepare themselves, their families, and others for eternal life with their Father in Heaven.

TEACH We teach students the doctrines and principles of the gospel as found in the scriptures and the words of the prophets. These doctrines and principles are taught in a way that leads to understanding and edification. We help students fulfill their role in the learning process and prepare them to teach the gospel to others.

TEACHING AND LEARNING EMPHASIS

To help us achieve our objective, teachers and students should:

Teach and learn by the Spirit.

Cultivate a learning environment of love, respect, and purpose.

Study the scriptures daily and read the text for the course.

Understand the context and content of the scriptures and the words of the prophets.

Identify, understand, and apply gospel doctrines and principles.

Explain, share, and testify of gospel doctrines and principles.

Master key scripture passages and basic doctrines.

Appendix D

Seminary Program Background and Assumptions

Seminary Program Background and Assumptions

Seminaries and Institutes of Religion (S&I) function within the Church

Educational System (CES) of the LDS Church provide religious education for secondary students between the ages of 14-18. The underlying belief for the entire organization is that there should be a balance of secular and religious knowledge, that either without the other is incomplete. In an effort to reach out to all secondary students S&I offers three types of seminary programs. The first type of seminary program is the released time program. The released time seminary program exists primarily in the western United States where there are larger populations of LDS secondary students. Released time seminary allows students who have been released from their high school with parental consent to receive instruction from S&I teachers. The meeting place for released time seminary is typically a seminary building that has been constructed adjacent to a public high school that is only used as for the purpose previously described.

Released time seminary is taught by salaried employees of the LDS Church who have received a bachelor's degree from any accredited university in a field of the teacher's own choice. Prior to being hired as a full time salaried employee, teachers are typically hired part time while they are finishing their final year at the university. In 2009 there were 508 released time seminary programs, mostly in the western United States, with 548 released time seminary instructors (not counting administrators). S&I estimated that around 115,787 students were served in that year by released time seminary instructors.

The second type of seminary program is daily seminary. The daily seminary

program also provides religious education for secondary students between the ages of 14-18. Daily seminary is offered to students throughout the world where there are smaller populations of LDS secondary students and typically occurs 5 days a week in the early morning or afternoon outside of regular school hours. The meeting place for daily seminary is typically in an LDS church house (where all church members in the area regularly attend once a week on Sundays for religious services), in a rented building, or in the home of the seminary teacher. Daily seminary is taught by nonsalaried teachers who have been asked serve as seminary instructors by their ecclesiastical church leaders. In 2009, there were 216,961 daily seminary students taught by called teachers throughout the world.

The third type of seminary program is home study. Home study is offered in two different programs. The home study seminary program also provides religious education for secondary students between the ages of 14-18. Home study seminary is offered to students throughout the world where students cannot attend either of the previous two programs due to distance or some other plausible reason. Home study students typically meet once a week outside of regular public school hours to attend a class and go over assignments. Home study seminary maintains a strong emphasis on the student completing assignments and bringing those assignments to class. Home study seminary is taught by non-salaried teachers who have been asked serve as a seminary instructor by their ecclesiastical church leader. In 2009, there were approximately 30,300 home study students taught by called teachers throughout the world.

To help the reader better understand the culture of the seminary program, I think

it will be helpful to briefly list some general assumptions based on my personal experience.

1. Most parents feel strongly that their child should participate in the seminary program, and they are often the strongest motivators to ensure that their son or daughter attends.
2. In the official Objective statement of seminary there is reference made to preparing the Church's full time missionaries, This feature of the S&I program helps the program to be considered highly important by many parents and church leaders, since many students will be leaving within 1-3 years of high school graduation for 18-24 months of voluntary service, often in a location thousands of miles from their home, financed mainly by their families' financial contributions.
3. Some parents and students feel that taking released time from school requires the sacrifice of some academic subjects (like foreign language, band, drama, or math and science options). This required choice is especially true for students who need to make up classes to graduate.
4. The Released Time Seminary program has always been able to adapt to whatever schedule the adjacent school is on (e.g., block scheduling, where classes are twice as long but encountered every other day).
5. Seminary attendance and participation is socially recognized by ecclesiastical leaders in local church congregations, e.g. in announcements of who graduates and in recognition of any awards or offices held during Sunday meetings.
6. There are Seminary officers who are selected and asked to serve by their teacher and are later approved by that student's ecclesiastical leader (Bishop). In most cases serving as one of these officers is an honor for the student. The underlying belief for the entire enterprise is that there should be a balance of secular and religious knowledge, that either without the other is incomplete.
7. Another consideration for parents is that their son or daughter will someday marry, and that marrying within the faith is preferred. Thus, taking part in seminary is seen as one step toward that goal of marrying within the faith.

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- Emphasis: Quantitative Assessment and Student Self-assessment with Student Course Ratings
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MA Instructional Technology, Utah State University, Logan, Utah, 2003

- Master’s Project: A grading program designed to help teachers provide grade and attendance information to parents and ecclesiastical leaders.

BA Utah State University, Logan, Utah, 1998

Research Experience

- 2009. Conducted research with the Research Information Division of the LDS Church regarding seminary and institute curriculum materials
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Teaching Experience

- Church Educational System Instructor. Preston, ID, Montpelier, ID, & Layton, Utah 1998-2006
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